

Proton and Neutron Knowledge Organisation System

IRI:

<http://www.purl.org/pankos>

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Introduction

This ontology describes various neutron and synchrotron facilities from all over Europe, with information regarding their instruments and techniques used.

Classes

back scattering spectrometer	decommissioned	dichroism	diffraction
energy level value partition	facility	fluorescence luminescence	free electron laser
gamma ray spectrometer	high energy	high pressure	high resolution
high resolution spectrometer	imaging	imaging instrument	Instrument
large scale diffractometer	laue single diffractometer	light s a l s / l s	low engergy
low pressure	low resolution	luminescence	m x instrument
medium energy			
medium pressure	medium resolution	microscope	microscopy
muon source			
muon spectrometer	neutron diffraction	neutron diffractometer	neutron interferometer
neutron reflectometry	neutron source	neutron spectrometer	neutron spectroscopy
nuclear particle physics	operational	photon source	power diffractometer
pressure level value partition	proton accelerator	quasi laue diffractometer	

[reflectometer](#) [reflectometry](#) [resolution level value partition](#) [s a n s instrument](#)
[scanning transmission x ray microscope](#) [scattering](#) [single crystal diffractometer](#)
[small angle neutron scattering](#) [small angle x ray scattering](#) [spectrometer](#)
[spectroscopic photoemission and photoemission electron microscope](#) [spectroscopy](#)
[spin echo s a n s](#) [spin echo spectrometer](#) [status value partition](#) [synchrotron](#)
[technique](#) [test instrument](#) [three axis spectrometer](#) [time of flight spectrometer](#)
[tomography](#) [under construction](#) [under proposal](#) [x ray diffraction](#) [x ray imaging](#)
[x ray reflectometry](#) [x ray spectroscopy](#)

back scattering spectrometer^c

[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#BackScatteringSpectrometer>

has super-classes

[neutron spectrometer](#)^c

has members

[in10](#)ⁿⁱ

decommissioned^c

[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#Decommissioned>

has super-classes

[status value partition](#)^c

has members

[decommissioned](#)ⁿⁱ

is disjoint with

[operational](#)^c, [under construction](#)^c, [under proposal](#)^c

is also defined as

[named individual](#)

dichroism^c

[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#Dichroism>

has super-classes

[x ray spectroscopy](#)^c

has members

[x m l d](#)ⁿⁱ, [x mchi d](#)ⁿⁱ, [x n c d](#)ⁿⁱ, [x n l d](#)ⁿⁱ, [x ray linear dichroism](#)ⁿⁱ, [x ray magnetic linear dichroism](#)ⁿⁱ, [x ray magnetochiral dichroism](#)ⁿⁱ, [x ray natural circular dichroism](#)ⁿⁱ, [x ray natural linear dichroism](#)ⁿⁱ, [x raymagnetochiral dichroism](#)ⁿⁱ

is also defined as

[named individual](#)

diffraction^c

[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#Diffraction>

has super-classes[technique^c](#)**has sub-classes**[neutron diffraction^c](#), [x ray diffraction^c](#)**has members**[coherent imaging diffractionⁿⁱ](#), [enhanced imaging diffractionⁿⁱ](#), [imaging diffractionⁿⁱ](#), [p dⁿⁱ](#), [x p dⁿⁱ](#)**is also defined as**[named individual](#)[energy level value partition^c](#)[back to ToC or Class Toc](#)IRI: <http://www.purl.org/pankos#EnergyLevelValuePartition>**is equivalent to**[high energy^c](#) **or** [low energy^c](#) **or** [medium energy^c](#)**has super-classes**[value partition^c](#)**has sub-classes**[high energy^c](#), [low energy^c](#), [medium energy^c](#)[facility^c](#)[back to ToC or Class Toc](#)IRI: <http://www.purl.org/pankos#Facility>**has super-classes**[thing^c](#)**has sub-classes**[free electron laser^c](#), [muon source^c](#), [neutron source^c](#), [photon source^c](#), [proton accelerator^c](#), [synchrotron^c](#)**is in domain of**[has instrument^{op}](#), [uses file format^{op}](#)**is in range of**[in facility^{op}](#)**has members**[d e s yⁿⁱ](#), [elettra sincrotrone triesteⁿⁱ](#), [h z bⁿⁱ](#), [helmholtz zentrum berlinⁿⁱ](#), [p s iⁿⁱ](#)**is disjoint with**[technique^c](#)[fluorescence luminescence^c](#)[back to ToC or Class Toc](#)IRI: <http://www.purl.org/pankos#FluorescenceLuminescence>**has super-classes**[luminescence^c](#)

has members

[fluorescence spectroscopyⁿⁱ](#), [micro x ray fluorescenceⁿⁱ](#), [x ray excited optical luminescenceⁿⁱ](#), [x ray fluorescenceⁿⁱ](#)

is also defined as

[named individual](#)

[free electron laser^c](#)

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#FreeElectronLaser>

has super-classes

[facility^c](#)

has members

[fermiⁿⁱ](#), [flashⁿⁱ](#)

[gamma ray spectrometer^c](#)

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#GammaRaySpectrometer>

has super-classes

[spectrometer^c](#)

has members

[p n3ⁿⁱ](#)

[high energy^c](#)

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#HighEnergy>

has super-classes

[energy level value partition^c](#)

has members

[high energyⁿⁱ](#)

is disjoint with

[low energy^c](#), [medium energy^c](#)

is also defined as

[named individual](#)

[high pressure^c](#)

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#HighPressure>

has super-classes

[pressure level value partition^c](#)

has members

[high pressureⁿⁱ](#)

is disjoint with

[low pressure^c](#), [medium pressure^c](#)

is also defined as
[named individual](#)

high resolution^c

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#HighResolution>

has super-classes

[resolution level value partition^c](#)

has members

[high resolutionⁿⁱ](#)

is disjoint with

[low resolution^c](#), [medium resolution^c](#)

is also defined as

[named individual](#)

high resolution spectrometer^c

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#HighResolutionSpectrometer>

is equivalent to

[spectrometer^c](#) and ([has resolution level^{op} some high resolution^c](#))

is also defined as

named individual

imaging^c

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#Imaging>

has super-classes

[technique^c](#)

has sub-classes

[microscopy^c](#), [tomography^c](#), [x ray imaging^c](#)

has members

[absorption contrast imagingⁿⁱ](#), [holographyⁿⁱ](#), [phase contrast imagingⁿⁱ](#), [photoemission electron microscopyⁿⁱ](#), [scanned probe imagingⁿⁱ](#)

is also defined as

[named individual](#)

imaging instrument^c

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#ImagingInstrument>

is equivalent to

[Instrument^c](#) and ([supports technique^{op} some imaging^c](#))

has super-classes[Instrument^c](#)[Instrument^c](#)[back to ToC or Class ToC](#)**IRI:** <http://www.purl.org/pankos#Instrument>**is equivalent to**

[in facility^{op}](#) [some facility^c](#)
[supports technique^{op}](#) [some technique^c](#)

has sub-classes

[imaging instrument^c](#), [m x instrument^c](#), [microscope^c](#), [muon spectrometer^c](#), [neutron diffractometer^c](#), [neutron interferometer^c](#), [nuclear particle physics^c](#), [reflectometer^c](#), [s a n s instrument^c](#), [spectrometer^c](#), [test instrument^c](#)

is in domain of

[in facility^{op}](#), [supports technique^{op}](#)

is in range of

[has instrument^{op}](#), [technique of^{op}](#)

has members

[P05ⁿⁱ](#), [b a mlineⁿⁱ](#), [b l beamlineⁿⁱ](#), [b m28ⁿⁱ](#), [b16ⁿⁱ](#), [b21ⁿⁱ](#), [b8ⁿⁱ](#), [ci poⁿⁱ](#), [gas phase beamlineⁿⁱ](#), [i d02ⁿⁱ](#), [i07ⁿⁱ](#), [i12ⁿⁱ](#), [i13ⁿⁱ](#), [i15ⁿⁱ](#), [i21ⁿⁱ](#), [i23ⁿⁱ](#), [l u c i aⁿⁱ](#), [p04ⁿⁱ](#), [r g b l dipoleⁿⁱ](#), [r o c kⁿⁱ](#), [reflectometerⁿⁱ](#), [s a n s iⁿⁱ](#), [s a n s instrumentⁿⁱ](#), [single crystal diffractometerⁿⁱ](#), [the high energy materials science beamline](#) of [h z gⁿⁱ](#), [three axis spectrometerⁿⁱ](#), [thz beamlineⁿⁱ](#), [time of flight spectrometerⁿⁱ](#), [v3ⁿⁱ](#), [variable polarization x u v beamlineⁿⁱ](#)

[large scale diffractometer^c](#)[back to ToC or Class ToC](#)**IRI:** <http://www.purl.org/pankos#LargeScaleDiffractometer>**has super-classes**[neutron diffractometer^c](#)**has members**

[d11ⁿⁱ](#), [d16ⁿⁱ](#), [d22ⁿⁱ](#), [d33ⁿⁱ](#), [l a d i i iⁿⁱ](#)

[laue single diffractometer^c](#)[back to ToC or Class ToC](#)**IRI:** <http://www.purl.org/pankos#LaueSingleDiffractometer>**has super-classes**[neutron diffractometer^c](#)**has members**

[cyclopsⁿⁱ](#)

[light s a l s/ l s^c](#)[back to ToC or Class ToC](#)

IRI: <http://www.purl.org/pankos#LightSALS/LS>

has super-classes

[scattering^c](#)

[low energy^c](#)

[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#LowEngergy>

has super-classes

[energy level value partition^c](#)

has members

[low energyⁿⁱ](#)

is disjoint with

[high energy^c, medium energy^c](#)

[low pressure^c](#)

[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#LowPressure>

has super-classes

[pressure level value partition^c](#)

has members

[low pressureⁿⁱ](#)

is disjoint with

[high pressure^c, medium pressure^c](#)

is also defined as

[named individual](#)

[low resolution^c](#)

[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#LowResolution>

has super-classes

[resolution level value partition^c](#)

has members

[low resolutionⁿⁱ](#)

is disjoint with

[high resolution^c, medium resolution^c](#)

is also defined as

[named individual](#)

[luminescence^c](#)

[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#Luminescence>

has super-classes[technique^c](#)**has sub-classes**[fluorescence luminescence^c](#)**has members**[fluorescence tomographyⁿⁱ](#)**is also defined as**[named individual](#)[m x instrument^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#MXInstrument>**has super-classes**[Instrument^c](#)**has members**[i02ⁿⁱ, i03ⁿⁱ, i04ⁿⁱ, i04_1ⁿⁱ, i24ⁿⁱ](#)[medium energy^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#MediumEnergy>**has super-classes**[energy level value partition^c](#)**has members**[medium engergyⁿⁱ](#)**is disjoint with**[high energy^c, low engergy^c](#)[medium pressure^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#MediumPressure>**has super-classes**[pressure level value partition^c](#)**has members**[medium pressureⁿⁱ](#)**is disjoint with**[high pressure^c, low pressure^c](#)**is also defined as**[named individual](#)[medium resolution^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#MediumResolution>

has super-classes[resolution level value partition^c](#)**has members**[medium resolutionⁿⁱ](#)**is disjoint with**[high resolution^c, low resolution^c](#)**is also defined as**[named individual](#)[microscope^c](#)[back to ToC or Class Toc](#)IRI: <http://www.purl.org/pankos#Microscope>**has super-classes**[Instrument^c](#)**has sub-classes**[scanning transmission x ray microscope^c, spectroscopic photoemission and photoemission electron microscope^c](#)**has members**[scanning photoelectron microscopeⁿⁱ](#)[microscopy^c](#)[back to ToC or Class Toc](#)IRI: <http://www.purl.org/pankos#Microscopy>**has super-classes**[imaging^c](#)**has members**[electron microscopyⁿⁱ, scanning angle resolved photoemission spectromicroscopyⁿⁱ, scanning photoelectron microscopyⁿⁱ, scanning transmission x ray microscopyⁿⁱ, tomographic microscopy with c r l sⁿⁱ, x ray microscopyⁿⁱ, x ray photoemission microscopyⁿⁱ, x ray scanning microscopyⁿⁱ](#)**is also defined as**[named individual](#)[muon source^c](#)[back to ToC or Class Toc](#)IRI: <http://www.purl.org/pankos#MuonSource>**has super-classes**[facility](#)**has members**[susⁿⁱ](#)[muon spectrometer^c](#)[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#MuonSpectrometer>

has super-classes

[Instrument^c](#)

has members

[argusⁿⁱ](#), [emuⁿⁱ](#), [hifiⁿⁱ](#), [musrⁿⁱ](#)

[neutron diffraction^c](#)

[back to [ToC](#) or [Class Toc](#)]

IRI: <http://www.purl.org/pankos#NeutronDiffraction>

has super-classes

[diffraction^c](#)

has members

[high resolution powder diffractionⁿⁱ](#), [powder diffractionⁿⁱ](#), [single crystal diffractionⁿⁱ](#), [time of flight small angle neutron diffractionⁿⁱ](#)

is also defined as

[named individual](#)

[neutron diffractometer^c](#)

[back to [ToC](#) or [Class Toc](#)]

IRI: <http://www.purl.org/pankos#NeutronDiffractometer>

is equivalent to

[Instrument^c](#) and ([supports technique^{op}](#) [some](#) [neutron diffraction^c](#))

has super-classes

[Instrument^c](#)

has sub-classes

[large scale diffractometer^c](#), [laue single diffractometer^c](#), [power diffractometer^c](#), [quasi laue diffractometer^c](#), [single crystal diffractometer^c](#)

has members

[BL04ⁿⁱ](#), [d m cⁿⁱ](#), [enginxⁿⁱ](#), [e2ⁿⁱ](#), [e6ⁿⁱ](#), [e9ⁿⁱ](#), [g e mⁿⁱ](#), [i n e sⁿⁱ](#), [nimrodⁿⁱ](#), [pearlⁿⁱ](#), [polarisⁿⁱ](#), [rotaxⁿⁱ](#), [sandalsⁿⁱ](#), [sxdⁿⁱ](#), [v1ⁿⁱ](#), [v15ⁿⁱ](#), [wishⁿⁱ](#)

is also defined as

[named individual](#)

[neutron interferometer^c](#)

[back to [ToC](#) or [Class Toc](#)]

IRI: <http://www.purl.org/pankos#NeutronInterferometer>

has super-classes

[Instrument^c](#)

has members

[s18ⁿⁱ](#)

[neutron reflectometry^c](#)

[back to [ToC](#) or [Class Toc](#)]

IRI: <http://www.purl.org/pankos#NeutronReflectometry>

has super-classes

[reflectometry^c](#)

has members

[polarised neutron reflectivityⁿⁱ](#)

is also defined as

[named individual](#)

[neutron source^c](#)

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IRI: <http://www.purl.org/pankos#NeutronSource>

has super-classes

[facility^c](#)

has members

[beriiⁿⁱ](#), [illⁿⁱ](#), [isisⁿⁱ](#), [jcnsⁿⁱ](#), [singⁿⁱ](#)

[neutron spectrometer^c](#)

[back to [ToC](#) or [Class Toc](#)]

IRI: <http://www.purl.org/pankos#NeutronSpectrometer>

has super-classes

[spectrometer^c](#)

has sub-classes

[back scattering spectrometer^c](#), [spin echo spectrometer^c](#), [three axis spectrometer^c](#), [time of flight spectrometer^c](#)

has members

[in13ⁿⁱ](#), [in16bⁿⁱ](#), [irisⁿⁱ](#), [letⁿⁱ](#), [mapsⁿⁱ](#), [mariⁿⁱ](#), [merlinⁿⁱ](#), [osirisⁿⁱ](#), [toscaⁿⁱ](#), [vesuvioⁿⁱ](#)

is also defined as

[named individual](#)

[neutron spectroscopy^c](#)

[back to [ToC](#) or [Class Toc](#)]

IRI: <http://www.purl.org/pankos#NeutronSpectroscopy>

has super-classes

[spectroscopy^c](#)

has members

[elastic neutron scattering spectroscopyⁿⁱ](#), [inelastic neutron scattering spectroscopyⁿⁱ](#), [mass separator spectroscopyⁿⁱ](#), [three axis spectroscopyⁿⁱ](#), [timeof flight inverted geometry crystal analyser spectroscopyⁿⁱ](#), [to f spectroscopyⁿⁱ](#)

is also defined as

[named individual](#)

nuclear particle physics^c

[back to ToC or Class ToC](#)

IRI: <http://www.purl.org/pankos#NuclearParticlePhysics>

has super-classes

[Instrument^c](#)

has members

[cryo d e mⁿⁱ](#), [g r a n i tⁿⁱ](#), [p f1 bⁿⁱ](#), [p f2ⁿⁱ](#), [p n1ⁿⁱ](#), [p n3ⁿⁱ](#)

operational^c

[back to ToC or Class ToC](#)

IRI: <http://www.purl.org/pankos#Operational>

has super-classes

[status value partition^c](#)

has members

[operationalⁿⁱ](#)

is disjoint with

[decommissioned^c](#), [under construction^c](#), [under proposal^c](#)

is also defined as

[named individual](#)

photon source^c

[back to ToC or Class ToC](#)

IRI: <http://www.purl.org/pankos#PhotonSource>

has super-classes

[facility^c](#)

has members

[b e s s y i iⁿⁱ](#), [s l sⁿⁱ](#)

power diffractometer^c

[back to ToC or Class ToC](#)

IRI: <http://www.purl.org/pankos#PowerDiffractometer>

has super-classes

[neutron diffractometer^c](#)

[supports technique^{op}](#) [value powder diffraction](#)

has members

[d1 bⁿⁱ](#), [d18ⁿⁱ](#), [d2 bⁿⁱ](#), [d20ⁿⁱ](#), [d4ⁿⁱ](#), [s a l s aⁿⁱ](#)

is also defined as

[named individual](#)

pressure level value partition^c

[back to ToC or Class ToC](#)

IRI: <http://www.purl.org/pankos#PressureLevelValuePartition>

is equivalent to

[high pressure^c](#) or [low pressure^c](#) or [medium pressure^c](#)

has super-classes

[value partition^c](#)

has sub-classes

[high pressure^c](#), [low pressure^c](#), [medium pressure^c](#)

is in range of

[has pressure level^{op}](#)

[back to ToC or Class Toc](#)

proton accelerator^c

IRI: <http://www.purl.org/pankos#ProtonAccelerator>

has super-classes

[facility^c](#)

has members

[hi paⁿⁱ](#)

[back to ToC or Class Toc](#)

quasi laue diffractometer^c

IRI: <http://www.purl.org/pankos#Quasi-LaueDiffractometer>

has super-classes

[neutron diffractometer^c](#)

has members

[la di ii ni](#)

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reflectometer^c

IRI: <http://www.purl.org/pankos#Reflectometer>

has super-classes

[Instrument^c](#)

has members

[crispⁿⁱ](#), [d17ⁿⁱ](#), [figaroⁿⁱ](#), [interⁿⁱ](#), [offspecⁿⁱ](#), [polrefⁿⁱ](#), [surfⁿⁱ](#), [superadamⁿⁱ](#)

is also defined as

[named individual](#)

[back to ToC or Class Toc](#)

reflectometry^c

IRI: <http://www.purl.org/pankos#Reflectometry>

has super-classes

[technique^c](#)

has sub-classes[neutron reflectometry^c](#), [x ray reflectometry^c](#)**has members**[polarised neutron reflectometryⁿⁱ](#)**is also defined as**[named individual](#)[resolution level value partition^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#ResolutionLevelValuePartition>**is equivalent to**[high resolution^c](#) **or** [low resolution^c](#) **or** [medium resolution^c](#)**has super-classes**[value partition^c](#)**has sub-classes**[high resolution^c](#), [low resolution^c](#), [medium resolution^c](#)**is in range of**[has resolution level^{op}](#)[s a n s instrument^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#SANSInstrument>**has super-classes**[Instrument^c](#)**has members**[loqⁿⁱ](#), [nimrodⁿⁱ](#), [sandalsⁿⁱ](#), [sans2dⁿⁱ](#)**is also defined as**[named individual](#)[scanning transmission x ray microscope^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#ScanningTransmissionX-rayMicroscope>**has super-classes**[microscope^c](#)**has members**[P11ⁿⁱ](#)[scattering^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#Scattering>**has super-classes**[technique^c](#)

has sub-classes

[light scattering](#)^c, [small angle neutron scattering](#)^c, [small angle x ray scattering](#)^c

has members

[grazing small angle x ray scattering](#)ⁿⁱ, [microfocus x ray scattering](#)ⁿⁱ, [nanofocus x ray scattering](#)ⁿⁱ, [resonant scattering](#)ⁿⁱ, [resonant x ray scattering](#)ⁿⁱ, [small angle inelastic scattering](#)ⁿⁱ, [total scattering](#)ⁿⁱ, [waxs](#)ⁿⁱ, [wide angle x rays](#)ⁿⁱ

is also defined as

[named individual](#)

[single crystal diffractometer](#)^c

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IRI: <http://www.purl.org/pankos#SingleCrystalDiffractometer>

has super-classes

[neutron diffractometer](#)^c

has members

[cyclops](#)ⁿⁱ, [d10](#)ⁿⁱ, [d19](#)ⁿⁱ, [d23](#)ⁿⁱ, [d3](#)ⁿⁱ, [d9](#)ⁿⁱ, [orient express](#)ⁿⁱ, [sxd](#)ⁿⁱ, [vivaldi](#)ⁿⁱ

is also defined as

[named individual](#)

[small angle neutron scattering](#)^c

[back to [ToC](#) or [Class Toc](#)]

IRI: <http://www.purl.org/pankos#SmallAngleNeutronScattering>

has super-classes

[scattering](#)^c

has sub-classes

[spin echo s a n s](#)^c

has members

[a s a x s](#)ⁿⁱ, [anomalous small angle x ray scattering](#)ⁿⁱ, [grazing incident s a n s](#)ⁿⁱ, [time of flights a n s](#)ⁿⁱ, [ysans](#)ⁿⁱ

is also defined as

[named individual](#)

[small angle x ray scattering](#)^c

[back to [ToC](#) or [Class Toc](#)]

IRI: <http://www.purl.org/pankos#SmallAngleX-RayScattering>

has super-classes

[scattering](#)^c

has members

[diffuse x ray s a x s](#)ⁿⁱ, [grazing incident x rays a x s](#)ⁿⁱ, [inelastic x rays a x s](#)ⁿⁱ, [s a x s](#)ⁿⁱ, [small angle x ray scattering](#)ⁿⁱ, [soft x rays a x](#)ⁿⁱ, [ultra x rays a x](#)ⁿⁱ

is same as

[s a x s](#)

is also defined as

[named individual](#)[spectrometer^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#Spectrometer>**has super-classes**[Instrument^c](#)**has sub-classes**[gamma ray spectrometer^c](#), [neutron spectrometer^c](#)**has members**[p n1ⁿⁱ](#), [spectro microscopy beamlineⁿⁱ](#)[spectroscopic photoemission and photoemission electron microscope^c](#)[back to ToC or Class Toc](#)**IRI:**<http://www.purl.org/pankos#SpectroscopicPhotoemissionAndPhotoemissionElectronMicroscope>**has super-classes**[microscope^c](#)**has members**[NanospectroscopyBeamlineⁿⁱ](#)[spectroscopy^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#Spectroscopy>**has super-classes**[technique^c](#)**has sub-classes**[neutron spectroscopy^c](#), [x ray spectroscopy^c](#)**has members**[absorption spectroscopyⁿⁱ](#), [electron spectroscopyⁿⁱ](#), [gamma spectroscopyⁿⁱ](#), [h r x p sⁿⁱ](#), [high resolutino photo electron spectroscopyⁿⁱ](#), [high resolution core level photoemission spectroscopyⁿⁱ](#), [infrared micro spectroscopyⁿⁱ](#), [muon spectroscopyⁿⁱ](#), [optical spectroscopyⁿⁱ](#), [u v and visible circular dichroism spectroscopyⁿⁱ](#), [uv vuv spectroscopyⁿⁱ](#), [x ray spectroscopyⁿⁱ](#)**is also defined as**[named individual](#)[spin echo s a n s^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#SpinEchoSANS>**has super-classes**[small angle neutron scattering^c](#)

has members

[quasi elastic neutron spin echo scatteringⁿⁱ](#), [spin echo resolved grazing incidence scatteringⁿⁱ](#), [spin echo small angle neutron scatteringⁿⁱ](#)

is also defined as

[named individual](#)

[spin echo spectrometer^c](#)

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#Spin-echoSpectrometer>

has super-classes

[neutron spectrometer^c](#)

has members

[in11ⁿⁱ](#), [in15ⁿⁱ](#)

[status value partition^c](#)

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#StatusValuePartition>

is equivalent to

[decommissioned^c](#) **or** [operational^c](#) **or** [under construction^c](#) **or** [under proposal^c](#)

has super-classes

[value partition^c](#)

has sub-classes

[decommissioned^c](#), [operational^c](#), [under construction^c](#), [under proposal^c](#)

is in range of

[has operation status^{op}](#)

[synchrotron^c](#)

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#Synchrotron>

has super-classes

[facility^c](#)

has members

[albaⁿⁱ](#), [diamondⁿⁱ](#), [dlsⁿⁱ](#), [esrfⁿⁱ](#), [elettraⁿⁱ](#), [petraiiⁿⁱ](#), [s1sⁿⁱ](#), [soleilⁿⁱ](#)

[technique^c](#)

[back to [ToC](#) or [Class ToC](#)]

IRI: <http://www.purl.org/pankos#Technique>

has super-classes

[supports technique^{op}](#) **some** [technique^c](#)

[in facility^{op}](#) **some** [facility^c](#)

has sub-classes

[diffraction^c](#), [imaging^c](#), [luminescence^c](#), [reflectometry^c](#), [scattering^c](#), [spectroscopy^c](#)

is in domain of

[technique of](#)^{op}

is in range of

[supports technique](#)^{op}

has members

a r p e sⁿⁱ, angular dispersive x ray diffractionⁿⁱ, anomalous diffractiopnⁿⁱ, anomalous scatteringⁿⁱ, anomalous surface x ray scatteringⁿⁱ, back scattering spectroscopyⁿⁱ, c d iⁿⁱ, c i xⁿⁱ, c t rⁿⁱ, coherent diffraction imagingⁿⁱ, coherent imagingⁿⁱ, coherent radiationⁿⁱ, coherent scattering imagingⁿⁱ, coherent small angle x ray scatteringⁿⁱ, compton scatteringⁿⁱ, cosmic neutron radiationⁿⁱ, crystal truncation rodsⁿⁱ, d a f sⁿⁱ, d e iⁿⁱ, d s cⁿⁱ, deep x ray lithographyⁿⁱ, dichroismⁿⁱ, differential scanning calorimetryⁿⁱ, diffractionⁿⁱ, diffraction anomalous fine structureⁿⁱ, diffraction contrast tomographyⁿⁱ, diffraction enhanced imagingⁿⁱ, diffraction imagingⁿⁱ, diffuse x ray scatteringⁿⁱ, dispersive x ray diffractionⁿⁱ, e d d iⁿⁱ, e u v i lⁿⁱ, e x a f sⁿⁱ, elastic scatteringⁿⁱ, energy dispersive diffractionⁿⁱ, extended x ray absorption fine structureⁿⁱ, extreme ultraviolet interference lithographyⁿⁱ, f t hⁿⁱ, f t i rⁿⁱ, fermi surface mappingⁿⁱ, fluorescence luminescenceⁿⁱ, fourier transform holographyⁿⁱ, fourier transform infrared microscopyⁿⁱ, fourier transform infrared spectroscopyⁿⁱ, full field x ray imagingⁿⁱ, g i dⁿⁱ, g i s a x sⁿⁱ, g i x d^{hi}, grazing incidence diffractionⁿⁱ, grazing incidence small angle scatteringⁿⁱ, h a x p e sⁿⁱ, h e r f d^{hi}, h i k eⁿⁱ, high angular and high spatial resolution diffractionⁿⁱ, high energy resolution fluorescence detectionⁿⁱ, high kinetic energy photoelectron spectroscopyⁿⁱ, humidity controlⁿⁱ, i r microscopyⁿⁱ, i r spectroscopyⁿⁱ, i x sⁿⁱ, imagingⁿⁱ, imaging x ray photoelectron spectroscopyⁿⁱ, in situ magnetron sputteringⁿⁱ, in situ spectroscopyⁿⁱ, in situ surface diffractionⁿⁱ, in situ x ray diffractionⁿⁱ, inelastic neutron scattering spectroscopyⁿⁱ, inelastic x ray s a x sⁿⁱ, inelastic x ray scatteringⁿⁱ, infra red spectroscopyⁿⁱ, infraredⁿⁱ, infrared absorption spectroscopyⁿⁱ, k edge subtraction imagingⁿⁱ, laminographyⁿⁱ, laue diffractionⁿⁱ, litho e u vⁿⁱ, luminescenceⁿⁱ, m a dⁿⁱ, m o k eⁿⁱ, macromolecular crystallographyⁿⁱ, magnetic optical kerr effectⁿⁱ, magnetic spectroscopyⁿⁱ, mass spectrometryⁿⁱ, micro beamⁿⁱ, micro powder diffractionⁿⁱ, micro tomographyⁿⁱ, micro x a n e sⁿⁱ, micro x a sⁿⁱ, micro x r fⁿⁱ, micro x ray absorption near edge structureⁿⁱ, micro x ray fluorescenceⁿⁱ, microbeam radiation therapyⁿⁱ, microcrystallographyⁿⁱ, microforcus spectroscopyⁿⁱ, microscopyⁿⁱ, monochromatic imagingⁿⁱ, multi wavelength anomalous dispersionⁿⁱ, muon spin spectroscopyⁿⁱ, n e x a f sⁿⁱ, n i x sⁿⁱ, n r sⁿⁱ, nano a r p e sⁿⁱ, near edge x ray absorption fine structure spectroscopyⁿⁱ, neutron autoradiographyⁿⁱ, neutron depolarisationⁿⁱ, neutron diffractionⁿⁱ, neutron interferometryⁿⁱ, neutron reflectometryⁿⁱ, neutron scatteringⁿⁱ, neutron spectroscopyⁿⁱ, neutron transmission radiographyⁿⁱ, non crystalline diffractionⁿⁱ, non resonantinelastic x ray scatteringⁿⁱ, nuclear resonanceⁿⁱ, nuclear resonant scatteringⁿⁱ, p e e mⁿⁱ, pair distribution functionⁿⁱ, pair distribution function analysisⁿⁱ, photo electron spectroscopyⁿⁱ, photoemission spectroscopyⁿⁱ, pink beam imagingⁿⁱ, polarisation analysisⁿⁱ, quasielastic scatteringⁿⁱ, r e s p e sⁿⁱ, r f m s rⁿⁱ, r i x sⁿⁱ, radio frequency muon spin resonanceⁿⁱ, radiographyⁿⁱ, raman spectroscopyⁿⁱ, reflectometryⁿⁱ, resonant absorptionⁿⁱ, resonant inelastic soft x ray scatteringⁿⁱ, resonant photoemissionⁿⁱ, resonant spectroscopyⁿⁱ, s a r p e sⁿⁱ, s dⁿⁱ, s p mⁿⁱ, s t mⁿⁱ, s t x mⁿⁱ, s x r dⁿⁱ, scanned energyand angular photoelectron diffractionⁿⁱ, scanning angle resolved photoemission spectromicroscopyⁿⁱ, scanning probe microscopyⁿⁱ, scanning

[transmission x ray microscopyⁿⁱ](#), [scanning tunnelling microscopyⁿⁱ](#), [scanning x ray fluorescenceⁿⁱ](#), [scatteringⁿⁱ](#), [single crystal neutron diffractionⁿⁱ](#), [small angle neutron scatteringⁿⁱ](#), [small angle x ray scatteringⁿⁱ](#), [small molecule diffractionⁿⁱ](#), [soft x ray diffractionⁿⁱ](#), [soft x ray resonant scatteringⁿⁱ](#), [spectromicroscopyⁿⁱ](#), [spectronanoscopyⁿⁱ](#), [spectroscopyⁿⁱ](#), [spin and angle resolved photoelectron spectroscopyⁿⁱ](#), [spin echo s a n sⁿⁱ](#), [spin echo spectroscopyⁿⁱ](#), [spin resolved photoemissionⁿⁱ](#), [stereotaxic synchrotron radiation therapyⁿⁱ](#), [strain analysisⁿⁱ](#), [surface x ray diffractionⁿⁱ](#), [time of flight diffractionⁿⁱ](#), [time of flight spectroscopyⁿⁱ](#), [to f spectroscopyⁿⁱ](#), [tomographic microscopy with c r l sⁿⁱ](#), [tomographyⁿⁱ](#), [topographyⁿⁱ](#), [triple axis spectroscopyⁿⁱ](#), [u s a n sⁿⁱ](#), [u s a x sⁿⁱ](#), [u v soft x rayⁿⁱ](#), [u v visible spectroscopyⁿⁱ](#), [ultra high resolution small angle neutron scatteringⁿⁱ](#), [ultra small angle scatteringⁿⁱ](#), [ultra small angle x ray scatteringⁿⁱ](#), [v s a n sⁿⁱ](#), [v u v photoemissionⁿⁱ](#), [v u v spectroscopyⁿⁱ](#), [vacuum ultraviolet radiationⁿⁱ](#), [very small angle neutron scatteringⁿⁱ](#), [wide angle scatteringⁿⁱ](#), [wide angle x ray scatteringⁿⁱ](#), [x a f sⁿⁱ](#), [x a n e sⁿⁱ](#), [x a sⁿⁱ](#), [x d m rⁿⁱ](#), [x e sⁿⁱ](#), [x m c dⁿⁱ](#), [x m l dⁿⁱ](#), [x mchi dⁿⁱ](#), [x n c dⁿⁱ](#), [x n l dⁿⁱ](#), [x p c sⁿⁱ](#), [x p sⁿⁱ](#), [x r dⁿⁱ](#), [x r fⁿⁱ](#), [x r rⁿⁱ](#), [x ray absorption fine structureⁿⁱ](#), [x ray absorption near edge structureⁿⁱ](#), [x ray detected magnetic resonanceⁿⁱ](#), [x ray diffractionⁿⁱ](#), [x ray emission spectroscopyⁿⁱ](#), [x ray imagingⁿⁱ](#), [x ray lithographyⁿⁱ](#), [x ray magnetic circular dichroismⁿⁱ](#), [x ray photoemission microscopyⁿⁱ](#), [x ray photon correlation spectroscopyⁿⁱ](#), [x ray raman scatteringⁿⁱ](#), [x ray reflectometryⁿⁱ](#), [x ray scanning microscopyⁿⁱ](#), [x ray scatteringⁿⁱ](#)

is disjoint with

[facility^c](#)

[test instrument^c](#)

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IRI: <http://www.purl.org/pankos#TestInstrument>

has super-classes

[Instrument^c](#)

has members

[i n3ⁿⁱ](#)

[three axis spectrometer^c](#)

[back to ToC or Class ToC](#)

IRI: <http://www.purl.org/pankos#ThreeAxisSpectrometer>

has super-classes

[neutron spectrometer^c](#)

has members

[i n1ⁿⁱ](#), [i n12ⁿⁱ](#), [i n14ⁿⁱ](#), [i n20ⁿⁱ](#), [i n22ⁿⁱ](#), [i n8ⁿⁱ](#)

is also defined as

[named individual](#)

[time of flight spectrometer^c](#)

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IRI: <http://www.purl.org/pankos#Time-of-flightSpectrometer>

has super-classes[neutron spectrometer^c](#)**has members**[b r i s pⁿⁱ](#), [d7ⁿⁱ](#), [f i g a r oⁿⁱ](#), [i n 4 cⁿⁱ](#), [i n 5ⁿⁱ](#), [i n 6ⁿⁱ](#)**is also defined as**[named individual](#)[tomography^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#Tomography>**has super-classes**[imaging^c](#)**has members**[fluorescence tomographyⁿⁱ](#)**is also defined as**[named individual](#)[under construction^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#UnderConstruction>**has super-classes**[status value partition^c](#)**has members**[under constructionⁿⁱ](#)**is disjoint with**[decommissioned^c](#), [operational^c](#), [under proposal^c](#)**is also defined as**[named individual](#)[under proposal^c](#)[back to ToC or Class Toc](#)**IRI:** <http://www.purl.org/pankos#UnderProposal>**has super-classes**[status value partition^c](#)**has members**[under proposalⁿⁱ](#)**is disjoint with**[decommissioned^c](#), [operational^c](#), [under construction^c](#)**is also defined as**[named individual](#)[x ray diffraction^c](#)[back to ToC or Class Toc](#)

IRI: <http://www.purl.org/pankos#X-RayDiffraction>

has super-classes

[diffraction^c](#)

has members

[grazing incidence x ray diffractionⁿⁱ](#), [photoelectron diffractionⁿⁱ](#), [powder diffractionⁿⁱ](#), [resonant diffractionⁿⁱ](#), [single crystal diffractionⁿⁱ](#), [small angle diffractionⁿⁱ](#), [soft diffractionⁿⁱ](#), [surface diffractionⁿⁱ](#), [x ray photoelectron diffractionⁿⁱ](#), [x ray powder diffractionⁿⁱ](#)

is also defined as

[named individual](#)

[x ray imaging^c](#)

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IRI: <http://www.purl.org/pankos#X-RayImaging>

has super-classes

[imaging^c](#)

has members

[miccro g i s a x s tomographyⁿⁱ](#), [micro s a x s tomographyⁿⁱ](#), [scanning x ray fluorescenceⁿⁱ](#), [soft x ray imagingⁿⁱ](#), [x ray diffraction imagingⁿⁱ](#)

is also defined as

[named individual](#)

[x ray reflectometry^c](#)

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IRI: <http://www.purl.org/pankos#X-RayReflectometry>

has super-classes

[reflectometry^c](#)

has members

[x r r x ray reflectivityⁿⁱ](#), [x ray reflectivityⁿⁱ](#)

is also defined as

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[x ray spectroscopy^c](#)

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IRI: <http://www.purl.org/pankos#X-RaySpectroscopy>

has super-classes

[spectroscopy^c](#)

has sub-classes

[dichroism^c](#)

has members

[emmission x ray spectroscopyⁿⁱ](#), [extended x ray absorption fine structureⁿⁱ](#), [hard x ray photoelectron spectroscopyⁿⁱ](#), [photon correlation x ray spectroscopyⁿⁱ](#), [x ray absorption](#)

[spectroscopyⁿⁱ](#), [x ray magnetic circular dichroismⁿⁱ](#), [x ray photon correlation spectroscopyⁿⁱ](#)

is also defined as
[named individual](#)

Object Properties

[has instrument](#) [has operation status](#) [has pressure level](#) [has resolution level](#)
[in facility](#) [supports technique](#) [technique of](#) [uses file format](#)

[has instrument^{op}](#)

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IRI: <http://www.purl.org/pankos#hasInstrument>

has characteristics: asymmetric

has super-properties

[top object property](#)

has domain

[facility^c](#)

has range

[Instrument^c](#)

is inverse of

[in facility^{op}](#)

[has operation status^{op}](#)

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IRI: <http://www.purl.org/pankos#hasOperationStatus>

has characteristics: functional

has super-properties

[top object property](#)

has range

[status value partition^c](#)

[has pressure level^{op}](#)

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IRI: <http://www.purl.org/pankos#hasPressureLevel>

has super-properties

[top object property](#)

has range

[pressure level value partition^c](#)

has resolution level^{op}[back to ToC or Object Property Toc](#)**IRI:** <http://www.purl.org/pankos#hasResolutionLevel>**has characteristics:** functional**has range**[resolution level value partition^c](#)**in facility**^{op}[back to ToC or Object Property Toc](#)**IRI:** <http://www.purl.org/pankos#inFacility>**has characteristics:** asymmetric**has domain**[Instrument^c](#)**has range**[facility^c](#)**is inverse of**[has instrument^{op}](#)**supports technique**^{op}[back to ToC or Object Property Toc](#)**IRI:** <http://www.purl.org/pankos#supportsTechnique>**has characteristics:** asymmetric**has domain**[Instrument^c](#)**has range**[technique^c](#)**is inverse of**[technique of^{op}](#)**technique of**^{op}[back to ToC or Object Property Toc](#)**IRI:** <http://www.purl.org/pankos#techniqueOf>**has characteristics:** asymmetric**has domain**[technique^c](#)**has range**[Instrument^c](#)

is inverse of[supports technique^{op}](#)[uses file format^{op}](#)[back to ToC or Object Property ToC](#)IRI: <http://www.purl.org/pankos#usesFileFormat>**has domain**[facility^c](#)

Named Individuals

[7tmpwedd](#) [adress](#) [ailes](#) [alba](#) [alf](#) [aloisa](#) [amor](#) [antares](#)
[ape](#) [argus](#) [arpes](#) [asaxs](#) [absorption contrast imaging](#)
[absorption spectroscopy](#) [angular dispersive x ray diffraction](#) [anomalous diffractiopn](#)
[anomalous scattering](#) [anomalous small angle x ray scattering](#)
[anomalous surface x ray scattering](#) [bach](#) [bamline](#) [bear](#) [berii](#) [bessyii](#)
[bl beamline](#) [bm01a](#) [bm01b](#) [bm02](#) [bm05](#) [bm08](#) [bm14](#) [bm20a](#)
[bm20b](#) [bm23](#) [bm25a](#) [bm25b](#) [bm26a](#) [bm26b](#) [bm28](#) [bm28b](#)
[bm29](#) [bm30a](#) [bm30b](#) [bm32](#) [boa](#) [brisep](#) [b16](#) [b18](#) [b21](#) [b22](#) [b23](#)
[b24](#) [b8](#) [badelph](#) [back scattering spectroscopy](#) [BL04](#) [BOREAS](#)
[cassiopee](#) [cdi](#) [chipir](#) [cix](#) [crisp](#) [cristal](#) [csaxs](#) [ctr](#)
[cyclops](#) [cip](#) [CIRCE](#) [CLAESS](#) [CoherenceApplicationsBeamline](#)
[coherent diffraction imaging](#) [coherent imaging](#) [coherent imaging diffraction](#)
[coherent radiation](#) [coherent scattering imaging](#) [coherent small angle x ray scattering](#)
[compton scattering](#) [cosmic neutron radiation](#) [cryo dem](#) [crystal truncation rods](#)
[dafs](#) [dei](#) [deimos](#) [desirs](#) [desy](#) [deva](#) [diamond](#) [diffabs](#)
[disco](#) [dis](#) [dmc](#) [dolly](#) [dsc](#) [dxrl](#) [d1b](#) [d10](#) [d11](#) [d16](#) [d17](#) [d18](#)
[d19](#) [d2b](#) [d20](#) [d22](#) [d23](#) [d3](#) [d33](#) [d4](#) [d7](#) [d9](#) [decommissioned](#)
[deep x ray lithography](#) [dichroism](#) [differential scanning calorimetry](#) [diffraction](#)
[diffraction anomalous fine structure](#) [diffraction contrast tomography](#)
[diffraction enhanced imaging](#) [diffraction imaging](#) [diffuse x rays axs](#)
[diffuse x ray scattering](#) [dispersive x ray diffraction](#) [echo](#) [eddi](#) [eiger](#) [emu](#)
[enginx](#) [esrf](#) [euvil](#) [exafs](#) [exeed](#) [e1](#) [e10](#) [e11](#) [e2](#) [e3](#) [e4](#)
[e5](#) [e6](#) [e7](#) [e9](#) [elastic neutron scattering spectroscopy](#) [elastic scattering](#)
[electron microscopy](#) [electron spectroscopy](#) [elettra](#) [elettra sincrotrone trieste](#)
[emission x ray spectroscopy](#) [energy dispersive diffraction](#)
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[extreme ultraviolet interference lithography](#) [fel](#) [femto](#) [fermi](#) [figaro](#)
[fires](#) [flash](#) [focus](#) [fth](#) [ftir](#) [fermi surface mapping](#)
[fluorescence luminescence](#) [fluorescence spectroscopy](#) [fluorescence tomography](#)
[fourier transform holography](#) [fourier transform infrared microscopy](#)
[fourier transform infrared spectroscopy](#) [full field x ray imaging](#) [galaxies](#) [gem](#)
[gid](#) [gisaxs](#) [gixd](#) [gpd](#) [gps](#) [granit](#) [gamma spectroscopy](#)
[gas phase beamline](#) [grazing incidence diffraction](#)
[grazing incidence small angle scattering](#) [grazing incidence x ray diffraction](#)
[grazing incident s a n s](#) [grazing incident x rays axs](#)
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[high energy resolution fluorescence detection](#)
[high kinetic energy photoelectron spectroscopy](#) [high pressure](#)
[high resolution photo electron spectroscopy](#) [high resolution](#)
[high resolution core level photoemission spectroscopy](#) [high resolution powder diffraction](#)
[High Resolution Powder Diffraction Beamline](#) [HighResolutionDynamicsBeamline](#)
[holography](#) [humidity control](#) [icon](#) [id01](#) [id02](#) [id03](#) [id09 a](#) [id09 b](#)
[id10 e h1](#) [id10 e h2](#) [id11](#) [id12](#) [id13](#) [id14 1](#) [id14 2](#) [id14 4](#) [id15 a](#)
[id15 b](#) [id16 b n a](#) [id16 n i](#) [id17](#) [id18](#) [id19](#) [id20](#) [id21](#) [id22](#) [id22 n i](#)
[id23 1](#) [id23 2](#) [id24](#) [id26](#) [id27](#) [id28](#) [id29](#) [id31](#) [id32](#) [ill](#) [imat](#)
[ines](#) [inter](#) [in1](#) [in10](#) [in11](#) [in12](#) [in13](#) [in14](#) [in15](#) [in16 b](#) [in20](#)
[in22](#) [in3](#) [in4 c](#) [in5](#) [in6](#) [in8](#) [ir](#) [iris](#) [iris thz/infrared dipole beamline](#)
[ir microscopy](#) [ir spectroscopy](#) [isis](#) [isis s](#) [iuvs](#) [ixs](#) [i02](#) [i03](#) [i04](#)
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[in situ spectroscopy](#) [in situ surface diffraction](#) [in situ x ray diffraction](#)
[inelastic neutron scattering spectroscopy](#) [inelastic x ray s a x s](#)
[inelastic x ray scattering](#) [infra red spectroscopy](#) [infrared](#)
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[k edge subtraction imaging](#) [kmc1](#) [kmc2](#) [kmc3](#) [ladiii](#) [larmor](#) [lem](#)
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[low energy](#) [low pressure](#) [low resolution](#) [luminescence](#) [mad](#) [maps](#) [mari](#)
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[ms](#) [musr](#) [mxbeamline14.1](#) [mxbeamline14.2](#) [mxbeamline14.3](#)
[macromolecular crystallography](#) [magnetic optical kerr effect](#) [magnetic spectroscopy](#)
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[micro s a x s tomography](#) [micro tomography](#) [micro x a n e s](#) [micro x a s](#) [micro xrf](#)
[micro x ray absorption near edge structure](#) [micro x ray absorption spectroscopy](#)
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[microdiffraction imaging beamline](#) [microfocus x ray scattering](#)
[microforcus spectroscopy](#) [microscopy](#) [MISTRAL](#) [monochromatic imaging](#)
[multi wavelength anomalous dispersion](#) [muon spectroscopy](#) [muon spin spectroscopy](#)
[nanoscopium](#) [narziss](#) [neutra](#) [nexafs](#) [nimrod](#) [nixs](#) [nrs](#)
[nano a r p e s](#) [nano x a s](#) [NanoESCA](#) [nanofocus x ray scattering](#)
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[near edge x ray absorption fine structure spectroscopy](#) [neutron autoradiography](#)
[neutron depolarisation](#) [neutron diffraction](#) [neutron interferometry](#)
[neutron reflectometry](#) [neutron scattering](#) [neutron spectroscopy](#)
[neutron transmission radiography](#) [nexus](#) [non crystalline diffraction](#)
[non resonantinelastic x ray scattering](#) [nuclear resonance](#) [nuclear resonant scattering](#)
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[optics beamline](#) [orient express](#) [pci](#) [pd](#) [pdf](#) [pearl](#) [peem](#) [petraiii](#)
[p1 f1 b](#) [p2 f2](#) [pg beamline](#) [phoenix](#) [pleiades](#) [pm3](#) [pn1](#) [pn3](#)
[polaris](#) [poldi](#) [polref](#) [proxima1](#) [proxima2](#) [psi](#) [psiche](#) [pxi](#)
[pxii](#) [pxiii](#) [p04](#) [P05](#) [P06](#) [p06 hard x ray micro/ nano probe beamline](#) [P07](#)
[P08](#) [P11](#) [p12 e m b l bio s a x s beamline](#) [P13](#) [P14](#) [pair distribution function](#)
[pair distribution function analysis](#) [phase contrast imaging](#) [photo electron spectroscopy](#)
[photoelectron diffraction](#) [photoemission electron microscopy](#)
[photoemission spectroscopy](#) [photon correlation x ray spectroscopy](#)
[pink beam imaging](#) [pol lux](#) [polarisation analysis](#) [polarised neutron reflectivity](#)
[polarised neutron reflectometry](#) [powder diffraction](#)
[quasi elastic neutron spin echo scattering](#) [quasielastic scattering](#) [r e s p e s](#) [rfmsr](#)
[rg b l dipole](#) [rixs](#) [rock](#) [rotax](#) [radio frequency muon spin resonance](#)

radiography raman spectroscopy raw reflectometer reflectometry
 resonant absorption resonant diffraction resonant inelastic soft x ray scattering
 resonant photoemission resonant scattering resonant spectroscopy
 resonant x ray scattering ResonantScatteringandDiffractionBeamline ritaii salsa
 samba sandals sani sansi sansii sans instrument sans2d
 sarpe saxe saxe beamline sd sextants sim sing sirius
 sis sissi sixs sls smis soleil speleem spm stm stxm
 surf swing sxd sxrd syrmep s18
 scanned energy and angular photoelectron diffraction scanned probe imaging
 scanning angle resolved photoemission spectromicroscopy
 scanning photoelectron microscope scanning photoelectron microscopy
 scanning probe microscopy scanning transmission x ray microscopy
 scanning tunnelling microscopy scanning x ray fluorescence scattering
 single crystal diffraction single crystal diffractometer single crystal neutron diffraction
 small angle diffraction small angle inelastic scattering small angle neutron scattering
 small angle x ray scattering small molecule diffraction soft diffraction
 soft x ray diffraction soft x ray imaging soft x ray resonant scattering soft x rays ax
 spectro microscopy beamline spectromicroscopy spectronanoscropy spectroscopy
 spin and angle resolved photoelectron spectroscopy
 spin echo resolved grazing incidence scattering spin echo sans
 spin echo small angle neutron scattering spin echo spectroscopy
 spin resolved photoemission stereotaxic synchrotron radiation therapy strain analysis
 sus super ad am super esca super xas surface diffraction
 surface x ray diffraction taspo tempo tg m7 thz beamline tomcat
 tosca the high energy materials science beamline of hzg
 the plane grating monochromator beamline three axis spectrometer
 three axis spectroscopy thz beamline time of flight diffraction time of flight sans
 time of flight small angle neutron diffraction time of flight spectrometer
 time of flight spectroscopy time of flight inverted geometry crystal analyser spectroscopy
 tof spectroscopy tomographic microscopy with crls tomography topography
 total scattering trics triple axis spectroscopy twin mic ue112 pgm1
 ue52 pgm ue56 1 pgm ue56 2 pgm1 ue56 2 pgm2 usans usaxs
 uv and visible circular dichroism spectroscopy uv soft xray uv visible spectroscopy
 u125 2 sg m u41 pg m u41 txm u49 2 pgm1 u49 2 pgm2
 ultra high resolution small angle neutron scattering ultra small angle scattering
 ultra small angle x ray scattering ultra x rays ax under construction under proposal
 uv vuv spectroscopy vesuvio vivaldi ysans vuv vuv photoemission
 vuv photoemission beamline vuv spectroscopy v1 v12a v14 v15 v16 v18
 v19 v2 v20 v3 v4 v6 v7 vacuum ultraviolet radiation
 variable polarization xuv beamline VERSOX very small angle neutron scattering
 wavs wish wide angle scattering wide angle x rays ax
 wide angle x ray scattering xafs xafs beamline xanes xas xdmr xes
 xili xmcld xmld xmchid xncl xnlid xpc xpd xps xrd
 xrd1 xrd2 xrf xrr xrr x ray reflectivity x ray absorption fine structure
 x ray absorption near edge structure x ray absorption spectroscopy
 x ray detected magnetic resonance x ray diffraction x ray diffraction imaging
 x ray emission spectroscopy x ray excited optical luminescence x ray fluorescence
 x ray fluorescence beamline x ray imaging x ray linear dichroism x ray lithography
 x ray magnetic circular dichroism x ray magnetic linear dichroism
 x ray magnetochemical dichroism x ray microscopy x ray natural circular dichroism
 x ray natural linear dichroism x ray photoelectron diffraction
 x ray photoelectron spectroscopy x ray photoemission microscopy
 x ray photon correlation spectroscopy x ray powder diffraction x ray raman scattering
 x ray reflectivity x ray reflectometry x ray scanning microscopy x ray scattering
 x ray spectroscopy x ray magnetochemical dichroism xtreme XALOC zoom

7 t m p w e d d iⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#7T-MPW-EDDI>**has facts**[supports technique^{op} energy dispersive diffraction](#)**a d r e s sⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ADRESS>**has facts**[supports technique^{op} angle resolved photoemission spectroscopy](#)[supports technique^{op} resonant inelastic soft x ray scattering](#)[in facility^{op} s l s](#)**a i l e sⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#AILES>**has facts**[supports technique^{op} infrared absorption spectroscopy](#)[in facility^{op} soleil](#)

The AILES Beamline is dedicated to Infrared Absorption Spectroscopy for materials and molecules. The usefull spectral range spans from the Mid- to Far Infrared (IR) or Terahertz (THz) domains, but the best performance concern the 8 to 1000 cm⁻¹ energy range, with a maximum resolution of 0.0008 cm⁻¹.

Research on AILES involves molecular spectroscopy and studies of optical properties of materials. The concerned scientific community spreads from physics to chemistry and biology.

a l b aⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ALBA>**belongs to**[synchrotron^c](#)**has facts**[has instrument^{op} BOREAS](#)[has instrument^{op} CIRCE](#)[has instrument^{op} CLAES](#)[has instrument^{op} MISTRAL](#)[has instrument^{op} BL04](#)[has instrument^{op} NCD](#)[has instrument^{op} XALOC](#)

a l fⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ALF>**has facts**

- [has operation status^{op} operational](#)
- [supports technique^{op} single crystal diffraction](#)

ALF provides quick, intuitive, rapid access for the alignment and assessment of single crystals for users of the main ISIS excitation instruments and the WISH diffractometer.

The ALF crystal alignment facility has a goniometer stack and a bank of position sensitive detectors which can be used to check the quality of single crystals, or align single crystals or multi-crystal arrays in preparation for other experiments at ISIS.

a l o i s aⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ALOISA>**has facts**

- [has energy level^{op} electron spectroscopy](#)
- [supports technique^{op} surface x ray diffraction](#)

ALOISA is a beamline dedicated to Surface Science. Thanks to its multitechnique end-station, ALOISA allows the Users to investigate both the chemistry and structure of surfaces, adsorbates and ultra-thin films. ALOISA offers the possibility to perform in-situ both medium energy electron spectroscopy and high energy surface x-ray diffraction. A grating-crystal monochromator is employed to cover a wide photon energy range spanning from 130 eV to 8 keV.

a m o rⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#AMOR>**has facts**

- [supports technique^{op} reflectometry](#)

a n t a r e sⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ANTARES>**has facts**

- [supports technique^{op} fermi surface mapping](#)
- [supports technique^{op} nano ar pes](#)
- [supports technique^{op} resonant photoemission](#)
- [in facility^{op} soleil](#)
- [supports technique^{op} scanned energyand angular photoelectron diffraction](#)

[supports technique^{op}](#) [scanning angle resolved photoemission spectromicroscopy](#)
[supports technique^{op}](#) [x ray absorption spectroscopy](#)

This beamline has been designed for a complete electronic structure determination using scanning-angle-resolved photoemission spectromicroscopy combined with a local structural characterization by means of Photoelectron Diffraction (PED) through its both modes, Forward scattering and Backscattering energy regimes. The central part of the project is focused on a finely tuned Fermi Surface Mapping study of crystalline complex materials with sub-micron (nano) spatial discrimination. The beamline consistently satisfies the conditions of a high-energy resolution and high-flux source of photons at the nano-size focal point provided by a Zone Plate (ZP) and order selection aperture (OSA) system. A spatial-scan sample manipulator with a resolution better than 30nm will control the temperature, angular and spatial position of the sample.

a p eⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#APE>

has facts

[supports technique^{op}](#) [a r p e s](#)
[supports technique^{op}](#) [x ray absorption spectroscopy](#)
[supports technique^{op}](#) [x a s](#)
[supports technique^{op}](#) [x m c d](#)

The APE concept is based on a state-of-the-art surface science laboratory as a support facility for advanced spectroscopies at two distinct beamlines using polarized synchrotron radiation in the ultraviolet and soft X-ray range from the Elettra storage ring. APE is a facility for spectroscopic investigation of solid surfaces and nanostructured matter for which the sample preparation and survey represent crucial and integral part of the experiment. For this reason a number of spectroscopic techniques (ARPES, XAS, XMCD/LD, XPS, Mott magnetometry) is coupled with sophisticated off-line preparation/growth and characterization tools (atomically resolved STM, LEED-Auger, magneto-optical Kerr effect).

a r g u sⁿⁱ

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IRI: <http://www.purl.org/pankos#ARGUS>

belongs to

[muon spectrometer^c](#)

has facts

[in facility^{op}](#) [i s i s](#)
[supports technique^{op}](#) [muon spectroscopy](#)
[has operation status^{op}](#) [operational](#)

Argus (Advanced Riken General-purpose mUsr Spectrometer) is housed in Port 2 of the RIKEN-RAL Muon Facility. It can be used for a wide variety of studies in the areas of magnetism, superconductivity, charge transport, molecular and polymeric materials and semiconductors.

arpesⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ARPES>**belongs to**[technique^c](#)**is same as**[angle resolved photoemission spectroscopy](#)**asaxsⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ASAXS>**belongs to**[small angle neutron scattering^c](#)**is same as**[anomalous small angle x ray scattering](#)**absorption contrast imagingⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#AbsorptionContrastImaging>**belongs to**[imaging^c](#)**absorption spectroscopyⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#AbsorptionSpectroscopy>**belongs to**[spectroscopy^c](#)**angular dispersive x ray diffractionⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#AngularDispersiveX-rayDiffraction>**belongs to**[technique^c](#)**anomalous diffractionⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#AnomalousDiffraction>**belongs to**[technique^c](#)

[anomalous scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#AnomalousScattering>**belongs to**[technique^c](#)[anomalous small angle x ray scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#AnomalousSmallAngleX-RayScattering>**belongs to**[small angle neutron scattering^c](#)**is same as**[asaxs](#)[anomalous surface x ray scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#AnomalousSurfaceX-rayScattering>**belongs to**[technique^c](#)[b a c hⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#BACH>**has facts**[supports technique^{op} v soft x ray](#)

The BACH beamline belongs to the Istituto Officina dei Materiali (IOM) of the Consiglio Nazionale delle Ricerche (CNR) and it is operated by a CNR team in collaboration with Elettra-Sincrotrone Trieste (ST) S.C.p.A.

The beamline works in the UV-soft x-ray photon energy range (35-1600 eV) with selectable light polarization (linear horizontal and vertical, circular and elliptical), high energy resolution (the resolving power exceeds 10000), high intensity and brilliance and time resolution (70 ps in x-ray absorption and 300 ms in photoemission). The beamline offers a multi-technique approach for the investigation of the electronic, chemical, structural, magnetic and dynamical properties of materials.

[b a mlineⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#BAMline>**belongs to**[Instrument^c](#)

b e a rⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#BEAR>

has facts

[supports technique^{op}](#) [x ray absorption spectroscopy](#)

BEAR is placed at the 8.1 bending magnet port at Elettra. It is a joint venture involving the IOM-CNR and the University of Modena, with the support coming from the IFN-CNR – University of Padova Laboratory Group. The beamline is dedicated to the study of the optical, electronic and magnetic properties of materials also in UHV environment and their interplay with the geometrical structure, with particular attention to reduced dimensionality systems. The beamline operates in the 3-1600 eV spectral region, delivering selectable light polarization from linear to circular.

b e r i i n i[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#BERII>

belongs to

[neutron source^c](#)

has facts

[has instrument^{op}](#) [b8](#)
[has instrument^{op}](#) [e1](#)
[has instrument^{op}](#) [e10](#)
[has instrument^{op}](#) [e11](#)
[has instrument^{op}](#) [e2](#)
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[has instrument^{op}](#) [e7](#)
[has instrument^{op}](#) [e9](#)
[has instrument^{op}](#) [v1](#)
[has instrument^{op}](#) [v12a](#)
[has instrument^{op}](#) [v14](#)
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[has instrument^{op}](#) [v3](#)
[has instrument^{op}](#) [v4](#)
[has instrument^{op}](#) [v6](#)
[has instrument^{op}](#) [v7](#)

IRI: <http://www.purl.org/pankos#BESSYII>

belongs to

[photon source^c](#)

has facts

[has instrument^{op} b a mline](#)
[has instrument^{op} d x r12](#)
[has instrument^{op} h e s g m](#)
[has instrument^{op} i s i s s](#)
[has instrument^{op} k m c 1](#)
[has instrument^{op} k m c 2](#)
[has instrument^{op} k m c 3](#)
[has instrument^{op} litho e u v](#)
[has instrument^{op} m x b e a m l i n e 14.1](#)
[has instrument^{op} m x b e a m l i n e 14.2](#)
[has instrument^{op} m x b e a m l i n e 14.3](#)
[has instrument^{op} optics beamline](#)
[has instrument^{op} p m3](#)
[has instrument^{op} p t b e u v](#)
[has instrument^{op} p t b x r s](#)
[has instrument^{op} p t b xray](#)
[has instrument^{op} p t b compton](#)
[has instrument^{op} p t b undispersed](#)
[has instrument^{op} r g b l dipole](#)
[has instrument^{op} sur i cat](#)
[has instrument^{op} t g m 7](#)
[has instrument^{op} t hz beamline](#)
[has instrument^{op} u125 2 k m c](#)
[has instrument^{op} u125 2 n i m](#)
[has instrument^{op} u125 2 s g m](#)
[has instrument^{op} u41 t x m](#)
[has instrument^{op} u41 p g m](#)
[has instrument^{op} u49 2 p g m 1](#)
[has instrument^{op} u49 2 p g m 2](#)
[has instrument^{op} u e112 p g m 1](#)
[has instrument^{op} u e112 p g m 2a 1 2](#)
[has instrument^{op} u e112 p g m 2b 1 3](#)
[has instrument^{op} u e46 m a x y m u s](#)
[has instrument^{op} u e46 p g m 1](#)
[has instrument^{op} u e49 p g m s p e e m](#)
[has instrument^{op} u e49 p g m s m a r t](#)
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[has instrument^{op}](#) u e56 1 p g m
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[has instrument^{op}](#) u e56 1 z p m
[has instrument^{op}](#) u e56 2 p g m 1
[has instrument^{op}](#) u e56 2 p g m 2
[has instrument^{op}](#) my spot beamline
[has instrument^{op}](#) 7 t m p w e d d i
[has instrument^{op}](#) i r i s t hz/ infrared dipole beamline

b l beamlineⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BLBeamline>**belongs to**[Instrument^c](#)**b m01 aⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BM01A>**has facts**

[in facility^{op}](#) e s r f
[supports technique^{op}](#) [optical spectroscopy](#)
[supports technique^{op}](#) [powder diffraction](#)
[supports technique^{op}](#) [raman spectroscopy](#)
[supports technique^{op}](#) [single crystal diffraction](#)
[supports technique^{op}](#) [x ray diffraction](#)

Single-crystal and powder X-ray diffraction (including high pressures) with multi-axis diffractometer and large area detector.

b m01 bⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BM01B>**has facts**

[in facility^{op}](#) e s r f
[supports technique^{op}](#) [powder diffraction](#)
[supports technique^{op}](#) [raman spectroscopy](#)
[supports technique^{op}](#) [x ray absorption fine structure](#)

Beamline BM01B is dedicated to combined XRD/XAFS/Raman measurements.

b m02ⁿⁱ[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#BM02>

has facts

- [supports technique^{op} dafs](#)
- [in facility^{op} esrf](#)
- [supports technique^{op} gid](#)
- [supports technique^{op} gisaxs](#)
- [supports technique^{op} mad](#)
- [supports technique^{op} saxs](#)
- [supports technique^{op} ultra small angle x ray scattering](#)
- [supports technique^{op} waxs](#)
- [supports technique^{op} x ray diffraction](#)

D2AM is a beamline dedicated to structural investigations using anomalous scattering in materials science, with two instruments: a Kappa diffractometer and a small angle scattering camera.

b m05^{hi}

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#BM05>

has facts

- [supports technique^{op} coherent imaging](#)
- [supports technique^{op} diffraction imaging](#)
- [in facility^{op} esrf](#)
- [supports technique^{op} tomography](#)
- [supports technique^{op} x ray diffraction](#)
- [supports technique^{op} xrr](#)

BM05 has an active in-house research, development and test programme as well as availability for industrial users. BM05 is closed to academic proposals.

b m08^{hi}

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#BM08>

has facts

- [in facility^{op} esrf](#)
- [supports technique^{op} powder diffraction](#)
- [supports technique^{op} xas](#)

The Italian Collaborating Research Group GILDA at ESRF is a general-purpose beamline using a bending magnet source. Operational since September 1994, it is mainly dedicated to the investigation of local structures.

b m14^{hi}[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BM14>**has facts**

- [in facility^{op} e s r f](#)
- [supports technique^{op} m a d](#)
- [supports technique^{op} macromolecular crystallography](#)

BM14 is a macromolecular crystallography beamline specializing in the multiple and single anomalous diffraction (MAD/SAD) methods that enable users to determine the 3D atomic structure of crystalline macro-molecules.

b m20 aⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BM20A>**has facts**

- [in facility^{op} e s r f](#)
- [supports technique^{op} e x a f s](#)
- [supports technique^{op} x a n e s](#)

A highly specialized actinide/radionuclide XAFS beamline, also suited for environmental studies at low concentrations (a few ppm). Np, Pu, Am, Cm and Cf can be handled up to a total activity of 185 MBq.

b m20 bⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BM20B>**has facts**

- [in facility^{op} e s r f](#)
- [supports technique^{op} g i d](#)
- [supports technique^{op} in situ magnetron sputtering](#)
- [supports technique^{op} x ray diffraction](#)
- [supports technique^{op} x a s](#)
- [supports technique^{op} x r r](#)

The BM20B Materials Research Hutch (MRH) is dedicated to in-situ diffraction experiments during synthesis or processing.

b m23^{hi}[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BM23>**has facts**

[in facility^{op} e s r f](#)
[supports technique^{op} e x a f s](#)
[supports technique^{op} x ray diffraction](#)

BM23 is a bending magnet beamline optimized for standard EXAFS in a large energy range (5-75 keV), oriented towards high-quality data collection, stability and versatility, high automation, online data analysis and flexible sample environments.

b m25 aⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#BM25A>

Branch A is devoted to materials science in the energy range 5-45 keV. The experimental stations enable the performance of X-ray absorption spectroscopy and high-resolution powder diffraction measurements.

b m25 bⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#BM25B>

SpLine Branch B is devoted to material science in the energy range 5-45 keV. Facilities are available for surface/interface, grazing incidence, and single crystal X-ray diffraction and hard X-ray photoelectron spectroscopy.

b m26 aⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#BM26A>

has facts

[in facility^{op} e s r f](#)
[supports technique^{op} e x a f s](#)
[supports technique^{op} x a f s](#)
[supports technique^{op} x a n e s](#)

This beamline is specialised in X-ray spectroscopy in the energy range 4-32 keV. Time-resolved experiments and combinations with SAXS and WAXS are routinely carried out. There is appropriate infrastructure for on-line catalysis experiments.

b m26 bⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#BM26B>

has facts

[in facility^{op} e s r f](#)
[supports technique^{op} s a x s](#)
[supports technique^{op} w a x s](#)

This beamline is specialised in time-resolved small- and wide-angle X-ray scattering and is especially equipped to handle complicated sample environments.

b m28ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#BM28>

belongs to

[Instrument^c](#)

has facts

[in facility^{op} esrf](#)
[supports technique^{op} gisaxs](#)
[supports technique^{op} polarisation analysis](#)
[supports technique^{op} waxs](#)
[supports technique^{op} x ray scattering](#)
[supports technique^{op} xmcd](#)
[supports technique^{op} xrr](#)

XMaS is a materials research beamline mainly dedicated to magnetic materials. It offers a wide range of techniques and sample environments facilitating studies of soft and hard condensed matter, physical chemistry, and solid and liquid interfaces.

b m28 bⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#BM28B>

has facts

[in facility^{op} esrf](#)
[supports technique^{op} gisaxs](#)
[supports technique^{op} polarisation analysis](#)
[supports technique^{op} waxs](#)
[supports technique^{op} x ray scattering](#)
[supports technique^{op} xmcd](#)
[supports technique^{op} xrr](#)

b m29^{hi}

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#BM29>

has facts

[in facility^{op} esrf](#)
[supports technique^{op} saxs](#)

The BioSAXS beamline is a highly automated beamline dedicated to the study of proteins, macromolecular complexes, viruses etc., in solution. Samples can be investigated under various conditions (temperature, buffer, pH, kinetics) in a high-throughput manner or a HPLC unit can be used for in-situ (online) purification.

b m30 aⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BM30A>**has facts**[in facility^{op} e s r f](#)[supports technique^{op} m a d](#)[supports technique^{op} macromolecular crystallography](#)

This beamline is specially dedicated to crystallography of biological macromolecules with normal or multi-wavelength diffraction using anomalous dispersion.

b m30 bⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BM30B>**has facts**[supports technique^{op} e x a f s](#)[supports technique^{op} x a n e s](#)[supports technique^{op} x a s](#)[supports technique^{op} x e s](#)[supports technique^{op} x r f](#)

FAME is dedicated to X-ray absorption spectroscopy. FAME covers a wide variety of scientific fields, materials science, biophysics, chemistry but focuses mainly in geochemical sciences where, in most cases, the probed elements are highly diluted.

b m32ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BM32>**has facts**[supports technique^{op} d a f s](#)[in facility^{op} e s r f](#)[supports technique^{op} g i d](#)[supports technique^{op} g i s a x s](#)[supports technique^{op} laue diffraction](#)[supports technique^{op} x ray diffraction](#)[supports technique^{op} x r r](#)**b o aⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#BOA>**has facts**

[supports technique^{op} tomography](#)bris pⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#BRISP>

BRISP - TOF Spectrometer for Small Angle Inelastic Scattering

belongs to[time of flight spectrometer^c](#)**has facts**[in facility^{op} i_II](#)[supports technique^{op} small angle inelastic scattering](#)

BRISP is a new concept thermal neutron Brillouin scattering spectrometer which exploits the time-of-flight technique and is optimized to operate at small scattering angles with good energy resolution.

b16ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#B16>**belongs to**[Instrument^c](#)**has facts**[in facility^{op} d_i_a_m_o_n_d](#)[supports technique^{op} imaging](#)[supports technique^{op} reflectometry](#)

B16 is a flexible and versatile beamline for testing new developments in optics and detector technology and for trialling new experimental techniques. The beamline provides both white and monochromatic X-rays in several operational modes.

b18ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#B18>**has facts**[in facility^{op} d_i_a_m_o_n_d](#)[supports technique^{op} microforcus spectroscopy](#)b21ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#B21>**belongs to**[Instrument^c](#)

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} small angle diffraction](#)
- [supports technique^{op} small angle x ray scattering](#)

B21 is Small Angle X-ray Scattering (SAXS) beamline being designed to complement I22, Diamond's existing undulator SAXS beamline

b22ⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#B22>

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} imaging](#)
- [supports technique^{op} infrared](#)
- [supports technique^{op} infrared micro spectroscopy](#)
- [supports technique^{op} spectroscopy](#)

MIRIAM (Multimode InfraRed Microspectroscopy And Imaging) provides a brilliant and versatile microprobe for high resolution imaging of molecular structures as well as high sensitivity vibrational spectroscopy up to the THz range. Experiments span from biomedical applications to physical-chemical researches, with subsequent impact across a wide range of life and physical sciences.

b23ⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#B23>

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} x ray magnetic circular dichroism](#)
- [supports technique^{op} x ray natural circular dichroism](#)

b24ⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#B24>

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} full field x ray imaging](#)
- [has operation status^{op} under construction](#)

B24 is the Phase III full-field transmission microscope at Diamond designed specifically to meet the rising demand for tomographic imaging of biological specimens under near physiological conditions. The technique bridges the resolution gap that exists between electron microscopy and conventional light microscopy and allows acquisition of tomographic data from both native and fluorescent-labelled samples.

b8ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#B8>**belongs to**[Instrument^c](#)**has facts**[supports technique^{op} \[neutron autoradiography\]\(#\)](#)

The instrument B8 allows to irradiate and activate artistic, technical, or geological items (foils, stones etc.) and other materials with cold neutrons and to investigate it afterwards with imaging plate technique and/or to analyse it with gamma-spectroscopy. The painting is fixed on a support in front of a neutron guide end with an open area of 3.5 x12.5 cm².

ba d el phⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#BaDEIPh>**has facts**[supports technique^{op} \[arpes\]\(#\)](#)

The Band Dispersion and Electron-Phonon coupling (BaDEIPh) beamline provides photons in the energy range 4.6-40 eV with high flux, high resolving power, and horizontal-vertical linear polarization. The beamline serves an end station to perform primarily high-resolution angle-resolved photoemission spectroscopy (ARPES) experiments in the low photon energy regime. Photon energies lower than 15 eV provide enhanced bulk sensitivity, allow for the highest momentum and energy resolution, and are useful in tuning matrix elements which vary rapidly at low energy.

back scattering spectroscopyⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#BackScatteringSpectroscopy>**belongs to**[technique^c](#)**BL04ⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MSPD>**belongs to**[neutron diffractometer^c](#)**has facts**[has pressure level^{op} \[high pressure\]\(#\)](#)[has resolution level^{op} \[high resolution\]\(#\)](#)[supports technique^{op} \[powder diffraction\]\(#\)](#)

The Materials Science and Powder Diffraction Beamline will be devoted to high resolution powder diffraction and high pressure powder diffraction using diamond anvil cells. The beamline will operate between 8 and 50 keV. This energy range covers very well the desirable range for almost any powder diffraction experiment, and at the same time it will be possible to perform both total scattering experiments, and high pressure diffraction, for which it is desirable and sometimes necessary to have high energy sources ($E > 30$ KeV).

BOREASⁿⁱ

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IRI: <http://www.purl.org/pankos#BOREAS>

has facts

- [supports technique^{op} resonant absorption](#)
- [supports technique^{op} resonant scattering](#)
- [has pressure level^{op} x m c d](#)
- [has pressure level^{op} x m l d](#)

BOREAS beamline instrumentation and ambitious x-ray optical design at the service of these two complementary endstations make possible soft x-ray (magnetic) circular and linear dichroism (XMCD/XMLD) measurements and other related characterization techniques at the frontier of materials science studies.

cassiopeeⁿⁱ

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IRI: <http://www.purl.org/pankos#CASSIOPEE>

has facts

- [supports technique^{op} arpes](#)
- [supports technique^{op} resonant spectroscopy](#)
- [in facility^{op} soleil](#)
- [supports technique^{op} spin resolved photoemission](#)

The CASSIOPEE beamline is a soft X-ray beamline dedicated to high resolution ARPES, spin-resolved photoemission and resonant spectroscopies in the 8 eV-1500 eV photon energy range. This wide energy range allows both surface and bulk studies of condensed matter. The beamline uses two undulators as a source with high flux and adjustable polarisation.

cdiⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#CDI>

belongs to

- [technique^c](#)

is same as

- [coherent diffraction imaging](#)

chipirⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#CHIPIR>**has facts**[supports technique^{op}](#) [cosmic neutron radiation](#)[has operation status^{op}](#) [under construction](#)

Chipir will be the first dedicated facility outside of the US to look at how silicon microchips respond to cosmic neutron radiation. The new neutron beam line at ISIS will dramatically speed up electronics testing with a measurement of just one hour being equivalent to exposing microchips to high-energy neutrons over hundreds of years of flying time in an aircraft. The instrument will be the world's best facility for screening microchips with neutrons, leading to safer, more reliable electronic systems.

cixⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#CIX>**belongs to**[technique^c](#)**is same as**[coherent scattering imaging](#)**crispⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#CRISP>**belongs to**[reflectometer^c](#)**has facts**[in facility^{op}](#) [isis](#)[has operation status^{op}](#) [operational](#)[supports technique^{op}](#) [reflectometry](#)

Crisp is one of five neutron reflectometers (NR) at ISIS. It is the original NR instrument and was designed for high resolution studies of a wide range of interfacial phenomena, such as:

Spintronics

Magnetic nanostructures and patterned media.

Complex biological layered structures, eg complex soap films.

Fundamental magnetism and superconductivity.

Complex polymer films.

cristalⁿⁱ[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#CRISTAL>

has facts

- [supports technique^{op}](#) [coherent diffraction imaging](#)
- [supports technique^{op}](#) [high angular and high spatial resolution diffraction](#)
- [in facility^{op}](#) [soleil](#)

CRISTAL is an undulator-based diffraction beamline, dedicated to single crystals and powders between 4 and 30 keV.

c s a x sⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#cSAXS>

has facts

- [supports technique^{op}](#) [coherent small angle x ray scattering](#)
- [in facility^{op}](#) [s1s](#)

c t rⁿⁱ

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IRI: <http://www.purl.org/pankos#CTR>

belongs to

- [technique^c](#)

is same as

- [crystal truncation rods](#)

c y c l o p sⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#CYCLOPS>

CYlindrical Ccd Laue Octagonal Photo Scintillator

belongs to

- [laue single diffractometer^c](#)
- [single crystal diffractometer^c](#)

has facts

- [in facility^{op}](#) [i11](#)
- [supports technique^{op}](#) [single crystal diffraction](#)

CYCLOPS is a Laue single crystal diffractometer, with an ultra-large set of area detectors. Because of the high flux on the sample from a continuous white neutron source, it will allow real-time exploration of reciprocal space and rapid structure refinement

c i p oⁿⁱ

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IRI: <http://www.purl.org/pankos#CiPo>

belongs to

[Instrument^c](#)

The Circular Polarization beamline (CiPo) is primarily characterized by its capability of providing a synchrotron radiation beam of variable polarization (Circular to Linear) in a very broad range of photon energies, 5 to 900 eV. The photon beam is produced by an Electromagnetic Elliptical Wiggler and is dispersed by means of two collinear monochromators, a Normal Incidence Monochromator (NIM) and a Spherical Grating Monochromator (SGM), that alternatively provide two beams in the UV-VUV (5 - 40 eV) and soft X-rays (40 - 900 eV) respectively.

CIRCEⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#CIRCE>

has facts

[supports technique^{op} photoemission electron microscopy](#)
[supports technique^{op} photoemission spectroscopy](#)

CIRCE is a variable polarization soft X-ray beamline dedicated to advanced photoemission experiments. A plane grating monochromator covering the energy range 100 - 2000 eV is shared between two independent branches with dedicated experimental endstations: PEEM (photoemission electron microscopy) and NAPP (near ambient pressure photoemission). A couple of deflecting mirrors directs the beam to one branch or to the other.

CLAESSⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#CLAESST>

has facts

[supports technique^{op} absorption spectroscopy](#)
[supports technique^{op} x m c d](#)

The CLAESST beamline will provide a simultaneous and unified access to two complementary techniques: absorption and emission spectroscopies. The energy range is 2.4 – 65 keV. At a later stage, x-ray magnetic circular dichroism (XMCD) technique with quarter-wave plates will be added.

Coherence Applications Beamlineⁿⁱ

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IRI: <http://www.purl.org/pankos#P10>

has facts

[supports technique^{op} coherent imaging](#)
[supports technique^{op} photon correlation x ray spectroscopy](#)

coherent diffraction imagingⁿⁱ

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IRI: <http://www.purl.org/pankos#CoherentDiffractionImaging>

belongs to

[technique^c](#)

is same as

[cdi](#)

coherent imagingⁿⁱ

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IRI: <http://www.purl.org/pankos#CoherentImaging>

belongs to

[technique^c](#)

coherent imaging diffractionⁿⁱ

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IRI: <http://www.purl.org/pankos#CoherentImagingDiffraction>

belongs to

[diffraction^c](#)

coherent radiationⁿⁱ

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IRI: <http://www.purl.org/pankos#CoherentRadiation>

belongs to

[technique^c](#)

coherent scattering imagingⁿⁱ

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IRI: <http://www.purl.org/pankos#CoherentScatteringImaging>

belongs to

[technique^c](#)

is same as

[cix](#)

coherent small angle x ray scatteringⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#CoherentSmallAngleX-rayScattering>

belongs to

[technique^c](#)

[compton scatteringⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ComptonScattering>**belongs to**[technique^c](#)**has facts**[technique of^{op} HighResolutionDynamicsBeamline](#)[cosmic neutron radiationⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#CosmicNeutronRadiation>**belongs to**[technique^c](#)[cryo d e mⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#CryoDEM>**belongs to**[nuclear particle physics^c](#)**has facts**[in facility^{op} i l l](#)

The Electric Dipole Moment of the neutron is a quantity which would violate the fundamental symmetries of space and time. As such it is one of the most important measurements in Particle Physics today. It addresses questions such as the cosmological significance of how the Universe has evolved from the Big Bang to the matter dominated at present.

[crystal truncation rodsⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#CrystalTruncationRods>**belongs to**[technique^c](#)**is same as**[ctr](#)[d a f sⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#DAFS>**belongs to**[technique^c](#)**is same as**

[diffraction anomalous fine structure](#)d e iⁿⁱ[back to ToC or Named Individual Toc](#)IRI: <http://www.purl.org/pankos#DEI>**belongs to**[technique^c](#)**is same as**[diffraction enhanced imaging](#)d e i m o sⁿⁱ[back to ToC or Named Individual Toc](#)IRI: <http://www.purl.org/pankos#DEIMOS>**has facts**[in facility^{op} soleil](#)[supports technique^{op} xmcd](#)

DEIMOS, Dichroism Experimental Installation for Magneto-Optical Spectroscopy, is a beamline dedicated to the study of the magnetic and electronic properties using polarized light. The application of synchrotron radiation to magnetism is related to the development of circularly polarized sources. The main advantage of X-ray Magnetic Circular Dichroism (XMCD) over other techniques addressing magnetic behavior lies in its chemical and orbital selectivity. One can probe the magnetic moment of one specific atom in a compound in which the absorbing atom is not a major component.

d e s i r sⁿⁱ[back to ToC or Named Individual Toc](#)IRI: <http://www.purl.org/pankos#DESIRS>**has facts**[in facility^{op} soleil](#)[supports technique^{op} vuv](#)

DESIRS (Dichroïsme Et Spectroscopie par Interaction avec le Rayonnement Synchrotron) is an undulator-based beamline covering the VUV range (5-40 eV) with a unique combination of ultra high resolution (200000 Resolving Power with the monochromator and up to 1000000 with a Fourier-transform spectrometer), spectral purity, flux and fully variable polarization. It provides new opportunities for the study of photon-induced processes via the valence shell on mainly dilute gas phase samples, such as cold molecules, radicals and laser-excited species, as well as in the condensed matter. This includes high resolution spectroscopy, molecular dynamics and reactivity, and photoionization dynamics studies.

d e s yⁿⁱ[back to ToC or Named Individual Toc](#)IRI: <http://www.purl.org/pankos#DESY>

belongs to[facility^c](#)**has facts**[has sub facility^{op} f l a s h](#)[uses file format^{op} n e x u s](#)[has sub facility^{op} p e t r a i i i](#)**d e v aⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DEVA>**has facts**[has operation status^{op} d e c o m m i s s i o n e d](#)[in facility^{op} i s i s](#)[supports technique^{op} r f m s r](#)

Deva muon instrument, it was a partly scheduled instrument, equipped with a dedicated spectrometer for studies using the radio-frequency mSR technique. It was also used for developing new techniques, and for more specialised experiments.

d i a m o n dⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DIAMOND>**belongs to**[synchrotron^c](#)**is same as**[d l s](#)**has facts**[has instrument^{op} V E R S O X](#)[has instrument^{op} b16](#)[has instrument^{op} b18](#)[has instrument^{op} b21](#)[has instrument^{op} b22](#)[has instrument^{op} b23](#)[has instrument^{op} b24](#)[has instrument^{op} I02](#)[has instrument^{op} i03](#)[has instrument^{op} i04](#)[has instrument^{op} i04_1](#)[has instrument^{op} i05](#)[has instrument^{op} i06](#)[has instrument^{op} i07](#)[has instrument^{op} i08](#)[has instrument^{op} i09](#)[has instrument^{op} i10](#)

[has instrument^{op} High Resolution Powder Diffraction Beamline](#)
[has instrument^{op} i12](#)
[has instrument^{op} i13](#)
[has instrument^{op} Hard X-ray Nanoprobe](#)
[has instrument^{op} i15](#)
[has instrument^{op} i16](#)
[has instrument^{op} i18](#)
[has instrument^{op} i19](#)
[has instrument^{op} i20](#)
[has instrument^{op} i21](#)
[has instrument^{op} i22](#)
[has instrument^{op} i23](#)
[has instrument^{op} i24](#)

is a high-resolution X-ray diffraction beamline for investigating the structure of surfaces and interfaces under different environmental conditions, including, for example, semiconductors and biological films.

diffabsⁿⁱ

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IRI: <http://www.purl.org/pankos#DIFFABS>

has facts

[in facility^{op} soleil](#)

The range of instrumental techniques that can be used on this line concerns numerous sectors of fundamental research and finalized applied research (oil industry, nuclear field , metallurgy) among which the science of materials and chemistry hold a predominant position. In particular, in situ studies of the transformations in materials at ultra-high temperature will be the domain of excellence of this line.

discoⁿⁱ

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IRI: <http://www.purl.org/pankos#DISCO>

has facts

[in facility^{op} soleil](#)

[supports technique^{op} vuv](#)

DISCO is a VUV to visible beamline dedicated to biochemistry, chemistry and cell biology. The spectral region is optimised between 60 and 700 nm with conservation of the natural polarization of the light.

dlsⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#DLS>

belongs to[synchrotron^c](#)**is same as**[diamond](#)[d m cⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DMC>**belongs to**[neutron diffractometer^c](#)**has facts**[supports technique^{op} powder diffraction](#)[d o l l yⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DOLLY>**has facts**[supports technique^{op} muon spin spectroscopy](#)[d s cⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DSC>**belongs to**[technique^c](#)**is same as**[differential scanning calorimetry](#)[d x r lⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DXRL>**has facts**[supports technique^{op} deep x ray lithography](#)

Deep X-ray lithography (DXRL) allows the production of high aspect ratio three dimensional structures in polymer with quasi perfect side-wall verticality and optical quality roughness. These structures can then be used as templates to mass-produce microparts made out of a large variety of metals, alloys or ceramics. The technique used to fabricate these parts is called LIGA.

[d1 bⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D1B>

belongs to[power diffractometer^c](#)**has facts**[in facility^{op} i_ll](#)[supports technique^{op} powder diffraction](#)**d10ⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D10>

Single-crystal four-circle diffractometer with three-axis energy analysis

belongs to[single crystal diffractometer^c](#)**has facts**[in facility^{op} i_ll](#)[supports technique^{op} single crystal diffraction](#)

D10 is unique in being the only four-circle diffractometer with optional energy analysis as on three-axis spectrometers. It also possesses a unique four circle dilution cryostat for temperatures down to 0.1K, and offers high reciprocal-space resolution and low intrinsic background, to medium real-space resolution.

d11ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D11>**belongs to**[large scale diffractometer^c](#)**has facts**[in facility^{op} i_ll](#)[supports technique^{op} small angle neutron scattering](#)

D11 is the archetype of a long, pinhole geometry instrument for small angle neutron scattering (SANS), designed for the study of large scale structures in soft matter systems, chemistry, biology, solid state physics and materials science. This instrument was upgraded as a part of the ILL's Millennium Programme.

d16ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D16>

Small momentum transfer diffractometer with variable vertical focusing

belongs to[large scale diffractometer^c](#)**has facts**[supports technique^{op} diffraction](#)

[in facility^{op} i II](#)

D16 is devoted to the study of partially ordered structures such as stacked membranes or intercalated layers. The scattering geometry obtained with large, vertically oriented samples, profits the most from the large vertical cross section of the beam at the sample position.

[d17ⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#D17>

belongs to

[reflectometer^c](#)

has facts

[in facility^{op} i II](#)

[supports technique^{op} time of flight s a n s](#)

D17, is a neutron reflectometer with horizontal scattering geometry (vertical surfaces) designed to be as flexible as possible in resolution and modes of operation. It is suitable for the study of surface structures in solids and solid/liquid interfaces over a wide range of length scales.

[d18ⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#D18>

belongs to

[power diffractometer^c](#)

[d19ⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#D19>

Thermal neutron diffractometer for single-crystal and fibre diffraction D19

belongs to

[single crystal diffractometer^c](#)

has facts

[in facility^{op} i II](#)

[supports technique^{op} single crystal diffraction](#)

The large structures diffractometer D19 is the monochromatic thermal neutron single crystal diffractometer of choice for determination of crystal structures with unit cells in the range of 102 to 106 angstrom

[d2 bⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#D2B>

belongs to[power diffractometer^c](#)**has facts**[in facility^{op} i II](#)[supports technique^{op} powder diffraction](#)

D2B is very high-resolution powder diffractometer designed to achieve the ultimate resolution, limited only by powder particle size ($\Delta d/d \approx 5 \times 10^{-4}$), but it was built so that an alternative high flux option, with resolution comparable to that of D1A, but much higher intensity, could be chosen at the touch of a button.

d20ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D20>**belongs to**[power diffractometer^c](#)**has facts**[in facility^{op} i II](#)[supports technique^{op} powder diffraction](#)

D20 is very high intensity 2-axis diffractometer equipped with a large microstrip detector. Due to the extremely high neutron flux, it opens up new possibilities for real-time experiments on very small samples.

d22ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D22>**belongs to**[large scale diffractometer^c](#)**has facts**[in facility^{op} i II](#)[supports technique^{op} small angle neutron scattering](#)

The high neutron flux and the flexibility of its setup make D22 an instrument that is particularly suited for real-time experiments and weakly scattering samples.

d23ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D23>**belongs to**[single crystal diffractometer^c](#)**has facts**[in facility^{op} i II](#)

[supports technique^{op}](#) [single crystal diffraction](#)

D23 is devoted to the determination of magnetic structures, magnetisation density maps and magnetic phase diagrams, in high field and/or high pressure, and at low temperature.

d3ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D3>**belongs to**[single crystal diffractometer^c](#)**d33ⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D33>**belongs to**[large scale diffractometer^c](#)**has facts**[in facility^{op}](#) [i_11](#)[supports technique^{op}](#) [small angle diffraction](#)[supports technique^{op}](#) [small angle neutron scattering](#)

D33 is a Small-Angle Neutron Scattering instrument for the characterization of samples with typical sizes varying from the nanometer scale to few tenth of micrometer. In addition to a standard monochromatic mode of operation, D33 offers a time of flight mode (TOF) to cover an enhanced dynamic q-range qmax/qmin in one instrument setting.

d4ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D4>**belongs to**[power diffractometer^c](#)**has facts**[in facility^{op}](#) [i_11](#)[supports technique^{op}](#) [powder diffraction](#)

D4, a two-axis diffractometer, uses short-wavelength neutrons from the hot source, and measures diffraction patterns over a large Q-range. This feature allows characterisation of local atomic order of non-crystalline materials (glasses, liquids, amorphous solids and solutions) with excellent accuracy.

d7ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#D7>

Diffuse Scattering Spectrometer

belongs to

[time of flight spectrometer^c](#)

has facts

[in facility^{op} i II](#)

[supports technique^{op} time of flight s a n s](#)

D7

d9ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#D9>

Hot neutron four-circle diffractometer

belongs to

[single crystal diffractometer^c](#)

has facts

[in facility^{op} i II](#)

[supports technique^{op} single crystal diffraction](#)

It is used for precise and accurate measurements of Bragg intensities up to very high momentum transfer. The resolution allows routine recording of extended data sets for the detailed study of atomic disorder and atomic thermal motions.

The short wavelength allows the study of compounds containing absorbing elements like Gd or Sm.

decommissionedⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#Decommissioned>

belongs to

[decommissioned^c](#)

is disjoint with

[operational, under construction, under proposal](#)

is also defined as

[class](#)

deep x ray lithographyⁿⁱ

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IRI: <http://www.purl.org/pankos#DeepX-RayLithography>

belongs to

[technique^c](#)

[dichroismⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#Dichroism>**belongs to**[technique^c](#)**is also defined as**[class](#)[differential scanning calorimetryⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#DifferentialScanningCalorimetry>**belongs to**[technique^c](#)**is same as**[d s c](#)[diffractionⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#Diffraction>**belongs to**[technique^c](#)**is also defined as**[class](#)[diffraction anomalous fine structureⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#DiffractionAnomalousFineStructure>**belongs to**[technique^c](#)**is same as**[d a f s](#)[diffraction contrast tomographyⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#DiffractionContrastTomography>**belongs to**[technique^c](#)[diffraction enhanced imagingⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#DiffractionEnhancedImaging>

belongs to[technique^c](#)**is same as**[d e i](#)[diffraction imagingⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DiffractionImaging>**belongs to**[technique^c](#)**is same as**[topography](#)[diffuse x ray s a x sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DiffuseX-RaySAXS>**belongs to**[small angle x ray scattering^c](#)[diffuse x ray scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DiffuseX-RayScattering>**belongs to**[technique^c](#)[dispersive x ray diffractionⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#DispersiveX-rayDiffraction>**belongs to**[technique^c](#)[e c h oⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ECHO>**has facts**[supports technique^{op} \[ultra small angle scattering\]\(#\)](#)[e d d iⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#EDDI>

belongs to

[technique^c](#)

is same as

[energy dispersive diffraction](#)

e i g e rⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#EIGER>

has facts

[supports technique^{op} triple axis spectroscopy](#)

e m uⁿⁱ

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IRI: <http://www.purl.org/pankos#EMU>

belongs to

[muon spectrometer^c](#)

has facts

[in facility^{op} i s i s](#)

[supports technique^{op} muon spectroscopy](#)

[has operation status^{op} operational](#)

EMU is a new 96-detector μ SR spectrometer which is optimised for zero field and longitudinal field measurements. Fields of up to 4500 G can be applied (this can be extended to 5000G if required), and sample temperatures in the range of 50mK to 1500K can be produced using a variety of sample environment equipment.

e n g i n xⁿⁱ

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IRI: <http://www.purl.org/pankos#ENGIN-X>

belongs to

[neutron diffractometer^c](#)

has facts

[in facility^{op} i s i s](#)

[has operation status^{op} operational](#)

[supports technique^{op} powder diffraction](#)

ENGIN-X is a dedicated engineering science facility at ISIS. The beamline is optimized for the measurement of strain, and thus stress, deep within a crystalline material, using the atomic lattice planes as an atomic 'strain gauge'. Internal and residual stresses in materials have a considerable effect on material properties, including fatigue resistance, fracture toughness and strength.

e s r fⁿⁱ

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IRI: <http://www.purl.org/pankos#ESRF>

belongs to

[synchrotron^c](#)

has facts

[has instrument^{op} b_m01_a](#)
[has instrument^{op} b_m01_b](#)
[has instrument^{op} b_m02](#)
[has instrument^{op} b_m05](#)
[has instrument^{op} b_m08](#)
[has instrument^{op} b_m14](#)
[has instrument^{op} b_m20_a](#)
[has instrument^{op} b_m20_b](#)
[has instrument^{op} b_m23](#)
[has instrument^{op} b_m25_a](#)
[has instrument^{op} b_m25_b](#)
[has instrument^{op} b_m26_a](#)
[has instrument^{op} b_m26_b](#)
[has instrument^{op} b_m28](#)
[has instrument^{op} b_m28_b](#)
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[has instrument^{op} i_d09_b](#)
[has instrument^{op} i_d10_e_h1](#)
[has instrument^{op} i_d10_e_h2](#)
[has instrument^{op} i_d11](#)
[has instrument^{op} i_d12](#)
[has instrument^{op} i_d13](#)
[has instrument^{op} i_d14_1](#)
[has instrument^{op} i_d14_2](#)
[has instrument^{op} i_d14_4](#)
[has instrument^{op} i_d15_a](#)
[has instrument^{op} i_d15_b](#)
[has instrument^{op} i_d16_n_i](#)
[has instrument^{op} i_d16_a_n_i](#)
[has instrument^{op} i_d16_b_n_a](#)
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[has instrument^{op} i d23 1](#)
[has instrument^{op} i d23 2](#)
[has instrument^{op} i d24](#)
[has instrument^{op} i d26](#)
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[has instrument^{op} i d29](#)
[has instrument^{op} i d31](#)
[has instrument^{op} i d32](#)

The European Synchrotron Radiation Facility (ESRF) is the most powerful synchrotron radiation source in Europe. Each year several thousand researchers travel to Grenoble, where they work in a first-class scientific environment to conduct exciting experiments at the cutting edge of modern science.

e u v i lⁿⁱ

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IRI: <http://www.purl.org/pankos#EUV-IL>

belongs to

[technique^c](#)

is same as

[extreme ultraviolet interference lithography](#)

e x a f sⁿⁱ

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IRI: <http://www.purl.org/pankos#EXAFS>

belongs to

[technique^c](#)

is same as

[extended x ray absorption fine structure](#)

e x e e dⁿⁱ

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IRI: <http://www.purl.org/pankos#EXEED>

has facts

[in facility^{op} i s i s](#)

[supports technique^{op} time of flight diffraction](#)

[has operation status^{op} under proposal](#)

Exeed will be a neutron time-of-flight diffractometer optimised for extreme environment studies of materials which will complement the capabilities of Wish on TS2 and Pearl on TS1. Exeed will deliver an extremely bright, focused beam in the thermal-cold region, providing

world-class access to regions of the phase diagram that have so far eluded neutron studies.

e1ⁿⁱ

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IRI: <http://www.purl.org/pankos#E1>

has facts

[supports technique^{op} elastic scattering](#)

e10ⁿⁱ

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IRI: <http://www.purl.org/pankos#E10>

has facts

[supports technique^{op} diffraction](#)

e11ⁿⁱ

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IRI: <http://www.purl.org/pankos#E11>

has facts

[supports technique^{op} laue diffraction](#)

FALCON has two scintillating plate detectors coupled to four iCCD cameras each, to produce a 2D projection of a large volume of reciprocal space in a single Laue pattern. Such images can be used to index complex crystal structures, characterise features such as twinning or preferred orientation whilst phase transitions can be investigated using a full range of sample environments including Low/High temperature, Magnetic field and High Pressure and combinations of these.

e2ⁿⁱ

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IRI: <http://www.purl.org/pankos#E2>

belongs to

[neutron diffractometer^c](#)

has facts

[supports technique^{op} powder diffraction](#)

[supports technique^{op} single crystal diffraction](#)

e3ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#E3>

has facts

[supports technique^{op} diffraction](#)

e4ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#E4>

The instrument is primarily suited for magnetic structure determination under various conditions, which includes magnetic fields up to 17 T, temperatures down to 30 mK and pressures up to 10 kbar. The most common application is to reveal spatial arrangement ordered spin structures. Using the polarized neutrons option facilitates the separation of magnetic contributions from nuclear scattering. The measurement of flipping ratios allows registration of very weak magnetic scattering and the mapping of spin density distributions.

e5ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#E5>**has facts**[supports technique^{op} diffraction](#)**e6ⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#E6>**belongs to**[neutron diffractometer^c](#)**has facts**[supports technique^{op} powder diffraction](#)**e7ⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#E7>**has facts**[supports technique^{op} neutron diffraction](#)

The neutron scattering diffractometer E7 is designed to investigate phase sensitive residual stress distributions within industrial bulk samples of different geometries. The instrument is primed for best resolution in this kind of measurements. The large distance between the reactor core and the monochromator together with a take-off angle of 90 degrees leads to low flux but high angular resolution of the diffractometer around 90 degrees scattering angle.

e9ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#E9>

Fine Resolution Powder Diffractometer (FIREPOD)

belongs to

[neutron diffractometer^c](#)**has facts**[supports technique^{op} powder diffraction](#)

The Fine Resolution Powder Diffractometer E9 (FIREPOD) is an angle-dispersive powder diffractometer optimized for a flat resolution function with a minimum width of the reflections at the 2omega-region with the highest density of reflections. The monochromator is placed at a distance of 11 m from the reactor core, which allows for a large take-off angle at the monochromator. An evacuated beam tube and a sapphire single crystal filter reduce air scattering and epithermal neutrons.

[elastic neutron scattering spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ElasticNeutronScatteringSpectroscopy>**belongs to**[neutron spectroscopy^c](#)[elastic scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ElasticScattering>**belongs to**[technique^c](#)[electron microscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ElectronMicroscopy>**belongs to**[microscopy^c](#)[electron spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ElectronSpectroscopy>**belongs to**[spectroscopy^c](#)[elettraⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Elettra>**belongs to**[synchrotron^c](#)**has facts**

[has instrument^{op} a l o i s a](#)
[has instrument^{op} a p e](#)
[has instrument^{op} b a c h](#)
[has instrument^{op} b e a r](#)
[has instrument^{op} ba d el ph](#)
[has instrument^{op} ci po](#)
[has instrument^{op} d x r l](#)
[has instrument^{op} ESCAMicroscopy](#)
[has instrument^{op} f e l](#)
[has instrument^{op} gas phase beamline](#)
[has instrument^{op} i u v s](#)
[has instrument^{op} i l l i t](#)
[has instrument^{op} m c x](#)
[has instrument^{op} materials science beamline](#)
[has instrument^{op} NanoESCA](#)
[has instrument^{op} NanospectroscopyBeamline](#)
[has instrument^{op} s a x s beamline](#)
[has instrument^{op} s i s s i](#)
[has instrument^{op} s y r m e p](#)
[has instrument^{op} spectro microscopy beamline](#)
[has instrument^{op} super e s c a](#)
[has instrument^{op} twin mic](#)
[has instrument^{op} v u v photoemission beamline](#)
[has instrument^{op} x ray fluorescence beamline](#)
[has instrument^{op} x a f s beamline](#)
[has instrument^{op} x r d1](#)
[has instrument^{op} x r d2](#)

Elettra Sincrotrone Trieste is a multidisciplinary international laboratory of excellence, specialized in generating high quality synchrotron and free-electron laser light and applying it in materials science. Its mission is to promote cultural, social and economic growth through:

Basic and applied research;

Technical and scientific training;

Transfer of technology and know-how.

Elettra develops excellence by providing state-of-the-art services for high-quality, internationally recognized research, thus contributing to enhance the positive impact and relevance of science on society.

elettra sincrotrone triesteⁿⁱ

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IRI: <http://www.purl.org/pankos#ElettraSincrotroneTrieste>

belongs to

[facility^c](#)

has facts

has sub facility^{op} [elettra](#)

has sub facility^{op} [f e r m i](#)

emmission x ray spectroscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#EmmissionX-RaySpectroscopy>

belongs to

[x ray spectroscopy^c](#)

energy dispersive diffractionⁿⁱ

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IRI: <http://www.purl.org/pankos#EnergyDispersiveDiffraction>

belongs to

[technique^c](#)

is same as

[e d d i](#)

enhanced imaging diffractionⁿⁱ

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IRI: <http://www.purl.org/pankos#EnhancedImagingDiffraction>

belongs to

[diffraction^c](#)

ESCAMicroscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#ESCAMicroscopy>

has facts

[supports technique^{op} \[scanning photoelectron microscopy\]\(#\)](#)

[supports technique^{op} \[soft x ray imaging\]\(#\)](#)

The Scanning photoelectron microscope (SPEM) hosted at the ESCAMicroscopy beamline allows to combine chemically surface sensitive measurements with high spatial resolution. A beam spot down to 120 nm and energy sensitivity within 180 meV using a third generation X-ray source providing more than 109 photons/s in the probe has opened the opportunity for material science to perform micro-characterization on a spatial scale comparable to that of the processes and the phases occurring on morphologically and chemically complex surfaces.

extended x ray absorption fine structureⁿⁱ

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IRI: <http://www.purl.org/pankos#ExtendedX-RayAbsorptionFineStructure>

belongs to

[x ray spectroscopy^c](#)

extended x ray absorption fine structureⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ExtendedX-rayAbsorptionFineStructure>**belongs to**[technique^c](#)**is same as**[exafs](#)**extreme ultraviolet interference lithography**ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ExtremeUltravioletInterferenceLithography>**belongs to**[technique^c](#)**is same as**[euvil](#)**f e l**ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#FEL>**has facts**[supports technique^{op} coherent radiation](#)

At Elettra, the setup for FEL operation is the single-pass, CHG scheme, with seeding performed using the radiation coming from a Ti:Sa laser.

f e m t oⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#FEMTO>**is same as**[micro x a s](#)**has facts**[in facility^{op} s l s](#)**f e r m i**ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#FERMI>**belongs to**[free electron laser^c](#)**f i g a r o**ⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#FIGARO>

Fluid Interfaces Grazing Angles Reflectometer

belongs to

[reflectometer^c](#)

[time of flight spectrometer^c](#)

has facts

[in facility^{op} \[i11\]\(#\)](#)

[supports technique^{op} \[time of flight s a n s\]\(#\)](#)

Figaro is a high flux, flexible resolution, time-of-flight reflectometer with a vertical scattering plane. It is optimized for the study of horizontal surfaces such as free liquids. No polarized neutron option is available currently nor is foreseen in the near future. The instrument includes the possibility to strike the interface from above or below the sample in a wide q-range.

f i r e sⁿⁱ

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IRI: <http://www.purl.org/pankos#FIRE>

has facts

[supports technique^{op} \[back scattering spectroscopy\]\(#\)](#)

[has operation status^{op} \[under proposal\]\(#\)](#)

FIRE is a proposal for a New High Resolution Backscattering spectrometer which eventually will replace IRIS. It aims to achieve an order of magnitude higher energy resolution with a concomitant unchanged range of momentum transfers. The extension to μ eV resolution, or in the time domain to ns relaxation times, will provide a new dynamic window to the UK user community in diverse fields like viscous liquids, biopolymers or quantum magnets and liquids.

f l a s hⁿⁱ

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IRI: <http://www.purl.org/pankos#FLASH>

belongs to

[free electron laser^c](#)

has facts

[has instrument^{op} \[b1 beamline\]\(#\)](#)

[has instrument^{op} \[p_g beamline\]\(#\)](#)

[has instrument^{op} \[the plane grating monochromator beamline\]\(#\)](#)

[has instrument^{op} \[thz beamline\]\(#\)](#)

f o c u sⁿⁱ

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IRI: <http://www.purl.org/pankos#FOCUS>

has facts

[supports technique^{op} \[to f spectroscopy\]\(#\)](#)

f t hⁿⁱ

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IRI: <http://www.purl.org/pankos#FTH>

belongs to

[technique^c](#)

is same as

[fourier transform holography](#)

f t i rⁿⁱ

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IRI: <http://www.purl.org/pankos#FTIR>

belongs to

[technique^c](#)

is same as

[fourier transform infrared microscopy, fourier transform infrared spectroscopy](#)

fermi surface mappingⁿⁱ

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IRI: <http://www.purl.org/pankos#FermiSurfaceMapping>

belongs to

[technique^c](#)

fluorescence luminescenceⁿⁱ

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IRI: <http://www.purl.org/pankos#FluorescenceLuminescence>

belongs to

[technique^c](#)

is also defined as

[class](#)

fluorescence spectroscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#FluorescenceSpectroscopy>

belongs to

[fluorescence luminescence^c](#)

fluorescence tomographyⁿⁱ

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IRI: <http://www.purl.org/pankos#FluorescenceTomography>

belongs to[luminescence^c](#)[tomography^c](#)[fourier transform holographyⁿⁱ](#)[back to [ToC](#) or [Named Individual ToC](#)]**IRI:** <http://www.purl.org/pankos#FourierTransformHolography>**belongs to**[technique^c](#)**is same as**[fth](#)[fourier transform infrared microscopyⁿⁱ](#)[back to [ToC](#) or [Named Individual ToC](#)]**IRI:** <http://www.purl.org/pankos#FourierTransformInfraredMicroscopy>**belongs to**[technique^c](#)**is same as**[ftir, fourier transform infrared spectroscopy](#)[fourier transform infrared spectroscopyⁿⁱ](#)[back to [ToC](#) or [Named Individual ToC](#)]**IRI:** <http://www.purl.org/pankos#FourierTransformInfraredSpectroscopy>**belongs to**[technique^c](#)**is same as**[ftir, fourier transform infrared microscopy](#)[full field x ray imagingⁿⁱ](#)[back to [ToC](#) or [Named Individual ToC](#)]**IRI:** <http://www.purl.org/pankos#FullFieldX-RayImaging>**belongs to**[technique^c](#)[galaxiesⁿⁱ](#)[back to [ToC](#) or [Named Individual ToC](#)]**IRI:** <http://www.purl.org/pankos#GALAXIES>**has facts**[supports technique^{op} \[h a x p e s\]\(#\)](#)[supports technique^{op} \[i x s\]\(#\)](#)[in facility^{op} \[s o l e i l\]\(#\)](#)

g e mⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#GEM>**belongs to**[neutron diffractometer^c](#)**has facts**[in facility^{op} *i s i s*](#)[supports technique^{op} \[neutron diffraction\]\(#\)](#)[has operation status^{op} \[operational\]\(#\)](#)**g i dⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#GID>**belongs to**[technique^c](#)**is same as**[grazing incidence diffraction](#)**g i s a x sⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#GISAXS>**belongs to**[technique^c](#)**is same as**[grazing incidence small angle scattering](#)**g i x dⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#GIXD>**belongs to**[technique^c](#)**is same as**[grazing incidence x ray diffraction](#)**g p dⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#GPD>**has facts**[supports technique^{op} \[muon spin spectroscopy\]\(#\)](#)**g p sⁿⁱ**[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#GPS>

has facts

[supports technique^{op} muon spectroscopy](#)

g r a n i tⁿⁱ

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IRI: <http://www.purl.org/pankos#GRANIT>

A 2nd-generation gravitational neutron spectrometer

belongs to

[nuclear particle physics^c](#)

has facts

[in facility^{op} ill](#)

The GRANIT is the follow-up project based on a second-generation UCN gravitational spectrometer with ultra-high energy resolution. It will provide more accurate studies of/with the quantum states as well as measurements of the resonant transitions between them. It will benefit from a dedicated UCN source delivering UCN to GRANIT with no significant dilution of the phase-space density.

gamma spectroscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#GammaSpectroscopy>

belongs to

[spectroscopy^c](#)

gas phase beamlineⁿⁱ

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IRI: <http://www.purl.org/pankos#GasPhaseBeamline>

belongs to

[Instrument^c](#)

has facts

[supports technique^{op} near edge x ray absorption fine structure spectroscopy](#)

[supports technique^{op} photo electron spectroscopy](#)

The Gas Phase Photoemission (GAPH) beamline is the only one at Elettra specifically devoted to research on gaseous systems.

GAPH offers a multi-technique approach for investigation of electronic properties of free atoms, molecules and clusters in the photon energy range 13-900 eV.

grazing incidence diffractionⁿⁱ

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IRI: <http://www.purl.org/pankos#GrazingIncidenceDiffraction>

belongs to

[technique^c](#)

is same as

[g i d](#)

[grazing incidence small angle scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#GrazingIncidenceSmallAngleScattering>

belongs to

[technique^c](#)

is same as

[g i s a x s, grazing incident s a n s](#)

[grazing incidence x ray diffractionⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#GrazingIncidenceX-RayDiffraction>

belongs to

[x ray diffraction^c](#)

is same as

[g i x d](#)

[grazing incident s a n sⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#GrazingIncidentSANS>

belongs to

[small angle neutron scattering^c](#)

is same as

[grazing incidence small angle scattering](#)

[grazing incident x ray s a x sⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#GrazingIncidentX-RaySAXS>

belongs to

[small angle x ray scattering^c](#)

[grazing small angle x ray scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#GrazingSmallAngleX-RayScattering>

belongs to

[scattering^c](#)

h a l 9500ⁿⁱ

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IRI: <http://www.purl.org/pankos#HAL-9500>

has facts

[supports technique^{op}](#) [muon spin spectroscopy](#)

h a x p e sⁿⁱ

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IRI: <http://www.purl.org/pankos#HAXPES>

belongs to

[technique^c](#)

is same as

[hard x ray photoelectron spectroscopy](#)

h e r f dⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HERFD>

belongs to

[technique^c](#)

is same as

[high energy resolution fluorescence detection](#)

h e r m e sⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HERMES>

has facts

[in facility^{op}](#) [s o l e i l](#)

[supports technique^{op}](#) [s t x m](#)

[supports technique^{op}](#) [x ray spectroscopy](#)

h e s g mⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HE-SGM>

has facts

[supports technique^{op}](#) [n e x a f s](#)

h e tⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HET>

has facts

[has operation status^{op}](#) [decommissioned](#)
[supports technique^{op}](#) [spectroscopy](#)

Het is optimised to measure high energy magnetic excitations. Although originally optimised for magnetic studies with most of its detectors positioned at angles below 30°, it is also used for investigations of dynamics in many other materials including disordered and biological systems. It has produced a large number of important results from powders, amorphous materials and single crystals.

h i f iⁿⁱback to [ToC](#) or [Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#HIFI>**belongs to**[muon spectrometer^c](#)**has facts**

[in facility^{op}](#) [isis](#)
[supports technique^{op}](#) [muon spectroscopy](#)
[has operation status^{op}](#) [operational](#)

The new high-field muon instrument at ISIS, called HiFi, provides applied longitudinal fields up to 5 T.

The magnet is a 5 T superconducting split-pair, with high field homogeneity over the sample volume and actively compensated stray field. It has additional z-axis coils up to 400 G for small changes to the main field (for example, for sweeping through level crossing resonances) as well as 150 G x- and y-axis transverse coils for calibration measurements, etc.

h i k eⁿⁱback to [ToC](#) or [Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#HIKE>**belongs to**[technique^c](#)**is same as**[high kinetic energy photoelectron spectroscopy](#)**h i p aⁿⁱ**back to [ToC](#) or [Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#HIPA>**belongs to**[proton accelerator^c](#)**h r p dⁿⁱ**back to [ToC](#) or [Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HRPD>

has facts

- [in facility^{op}](#) [is is](#)
- [has operation status^{op}](#) [operational](#)
- [supports technique^{op}](#) [powder diffraction](#)

HRPD, the High Resolution Powder Diffractometer, is the highest resolution neutron powder diffractometer of its type in the world.

h r p tⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HRPT>

has facts

- [has resolution level^{op}](#) [high resolution](#)
- [supports technique^{op}](#) [powder diffraction](#)

h r x p sⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HR-XPS>

belongs to

- [spectroscopy^c](#)

is same as

- [high resolution core level photoemission spectroscopy](#)

h z bⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HZB>

belongs to

- [facility^c](#)

is same as

- [helmholtz zentrum berlin](#)

The Helmholtz-Zentrum Berlin für Materialien und Energie (HZB) operates two scientific large-scale facilities for investigating the structure and function of matter: the research reactor BER II for experiments with neutrons, and the synchrotron radiation source BESSY II, which produces ultrabright photon beams ranging from Terahertz to hard X-rays. Due to this, HZB is one of the few centres world-wide to offer the whole range of instruments for neutron and synchrotron radiation within one laboratory structure.

hard x ray photoelectron spectroscopyⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HardX-RayPhotoelectronSpectroscopy>

belongs to

[x ray spectroscopy^c](#)

is same as

[h a x p e s](#)

Hard X-ray Nanoprobeⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#l14>

has facts

[in facility^{op} d i a m o n d](#)

[supports technique^{op} scanning x ray fluorescence](#)

[supports technique^{op} x ray spectroscopy](#)

The Hard X-ray nanoprobe beamline is a dedicated facility for micro-nano SAXS and nanoscale microscopy and is scheduled to come into operation in mid-late 2016.

The beamline will serve 2 end-stations. One will be a nanoprobe for which the design priority will be to achieve the smallest possible focus, with a development goal of 10 nm and initial aim of 30 nm. The optical design will be optimised for scanning X-ray fluorescence, X-ray spectroscopy and diffraction. The other station will be optimised to carry out small and wide angle X-ray scattering studies as well as scanning fluorescence mapping with a variable focus beam in the range 5μm – 100 nm.

HardX-RayDiffractionBeamlineⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#P02>

has facts

[supports technique^{op} high resolution powder diffraction](#)

[supports technique^{op} micro powder diffraction](#)

[in facility^{op} p e t r a i i](#)

[supports technique^{op} single crystal diffraction](#)

helmholtz zentrum berlinⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#HelmholtzZentrumBerlin>

belongs to

[facility^c](#)

is same as

[h z b](#)

has facts

[has sub facility^{op} b e r i i](#)

[has sub facility^{op} b e s s y i i](#)

high angular and high spatial resolution diffractionⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#HighAngularAndHighSpatialResolutionDiffraction>

belongs to

[technique^c](#)

[high energyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HighEnergy>

belongs to

[high energy^c](#)

is disjoint with

[low energy](#), [medium energy](#)

is also defined as

[class](#)

[high energy resolution fluorescence detectionⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HighEnergyResolutionFluorescenceDetection>

belongs to

[technique^c](#)

is same as

[herfd](#)

[high kinetic energy photoelectron spectroscopyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HighKineticEnergyPhotoelectronSpectroscopy>

belongs to

[technique^c](#)

is same as

[hike](#)

[high pressureⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HighPressure>

belongs to

[high pressure^c](#)

is disjoint with

[low pressure](#), [medium pressure](#)

is also defined as

[class](#)

[high resolutino photo electron spectroscopyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HighResolutionPhotoElectronSpectroscopy>

belongs to

[spectroscopy^c](#)

high resolutionⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HighResolution>

belongs to

[high resolution^c](#)

is disjoint with

[low resolution](#), [medium resolution](#)

is also defined as

[class](#)

high resolution core level photoemission spectroscopyⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HighResolutionCore-levelPhotoemissionSpectroscopy>

belongs to

[spectroscopy^c](#)

is same as

[hrxps](#)

has facts

[has resolution level^{op}](#) [high resolution](#)

high resolution powder diffractionⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HighResolutionPowderDiffraction>

belongs to

[neutron diffraction^c](#)

High Resolution Powder Diffraction Beamlineⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I11>

has facts

[in facility^{op}](#) [diamond](#)

[in facility^{op}](#) [dls](#)

[supports technique^{op}](#) [high resolution powder diffraction](#)

[in facility^{op}](#) [x ray powder diffraction](#)

I11 is a high resolution powder diffraction beamline for structural crystallography using an undulator source. This beamline specialises in investigating the structure of complex materials, including high temperature superconductors, ceramics, alloys, zeolites and

mineralogy.

[HighResolutionDynamicsBeamlineⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HighResolutionDynamicsBeamline>

has facts

- [supports technique^{op} inelastic x ray scattering](#)
- [supports technique^{op} nuclear resonant scattering](#)
- [in facility^{op} p e t r a i i](#)

[holographyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#Holography>

belongs to

- [imaging^c](#)

[humidity controlⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#HumidityControl>

belongs to

- [technique^c](#)

[i c o nⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#ICON>

has facts

- [supports technique^{op} phase contrast imaging](#)

[i d01ⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#ID01>

has facts

- [supports technique^{op} anomalous diffraction](#)
- [supports technique^{op} coherent diffraction imaging](#)
- [in facility^{op} e s r f](#)
- [supports technique^{op} grazing incidence diffraction](#)
- [supports technique^{op} grazing small angle x ray scattering](#)
- [supports technique^{op} small angle x ray scattering](#)
- [supports technique^{op} x ray diffraction](#)

i d02ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ID02>**belongs to**[Instrument^c](#)**has facts**[in facility^{op} e s r f](#)[supports technique^{op} small angle x ray scattering](#)[supports technique^{op} wide angle scattering](#)[supports technique^{op} x ray diffraction](#)**i d03ⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ID03>**has facts**[supports technique^{op} anomalous diffraction](#)[supports technique^{op} diffraction anomalous fine structure](#)[in facility^{op} e s r f](#)[supports technique^{op} grazing incidence diffraction](#)[supports technique^{op} grazing incident s a n s](#)[supports technique^{op} magnetic optical kerr effect](#)[supports technique^{op} surface x ray diffraction](#)[supports technique^{op} x ray reflectivity](#)

The beamline is dedicated to the in-situ studies of the structure and morphology of surfaces. It hosts two diffractometers, one for UHV studies and one that can host different user-specific apparatuses. Real-time experiments are possible, giving the possibility of studying growth processes or reaction at surfaces (as heterogenous catalysis).

i d09 aⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ID09A>**has facts**[supports technique^{op} diffuse x ray scattering](#)[in facility^{op} e s r f](#)[supports technique^{op} powder diffraction](#)[supports technique^{op} single crystal diffraction](#)

Beamline ID09A is dedicated to the determination of structural properties of solids at high pressure using angle-dispersive-diffraction with diamond anvil cells.

i d09 bⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#ID09B>

has facts

- [in facility^{op} e s r f](#)
- [supports technique^{op} grazing incidence diffraction](#)
- [supports technique^{op} laue diffraction](#)
- [supports technique^{op} small angle x ray scattering](#)
- [supports technique^{op} wide angle x ray scattering](#)
- [supports technique^{op} x ray diffraction](#)

Beamline for experiments with a time resolution down to 100 picoseconds. Structural change is initiated by short laser pulses and the structural changes are probed by delayed x-ray pulses. Set-up includes unique x-ray optics for making intense white beams.

i d10 e h1ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID10-EH1>

has facts

- [in facility^{op} e s r f](#)
- [supports technique^{op} grazing incidence diffraction](#)
- [supports technique^{op} grazing incidence small angle scattering](#)
- [supports technique^{op} x ray fluorescence](#)
- [supports technique^{op} x ray reflectivity](#)

ID10 is a multi-purpose, high-brilliance undulator beamline. Endstation EH1 is for high-resolution X-ray scattering and surface diffraction on liquid and solid interfaces, combining multiple techniques in a single instrument.

i d10 e h2ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID10-EH2>

has facts

- [in facility^{op} e s r f](#)
- [supports technique^{op} x ray photon correlation spectroscopy](#)

ID10 is a multi-purpose, high-brilliance undulator beamline. Endstation EH2 is for coherent small-angle X-ray scattering, X-ray photon correlation spectroscopy and coherent diffraction.

i d11ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID11>

has facts

- [supports technique^{op} diffraction contrast tomography](#)
- [supports technique^{op} diffuse x ray scattering](#)

[in facility^{op} e s r f](#)
[supports technique^{op} imaging](#)
[supports technique^{op} pair distribution function analysis](#)
[supports technique^{op} powder diffraction](#)
[supports technique^{op} x ray diffraction](#)

ID11 is a beamline dedicated to moderate to high energy diffraction and/or imaging studies of a variety of systems of interest for their physical, mechanical, or chemical properties. Very high spatial (less than 100 nm) and time (1 ms) resolution are available.

i d12ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID12>

has facts

[in facility^{op} e s r f](#)
[supports technique^{op} x ray absorption spectroscopy](#)
[supports technique^{op} x ray detected magnetic resonance](#)
[supports technique^{op} x ray magnetic circular dichroism](#)
[supports technique^{op} x ray magnetic linear dichroism](#)
[supports technique^{op} x ray natural circular dichroism](#)
[supports technique^{op} x ray natural linear dichroism](#)
[supports technique^{op} x ray reflectivity](#)
[supports technique^{op} x ray magnetochiral dichroism](#)

Beamline ID12 is a unique instrument worldwide that offers users full control of the polarisation state of the X-ray beam over a wide energy range (2-15 keV) and is devoted to research at the ultimate limits of X-ray spectroscopy.

i d13ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID13>

has facts

[in facility^{op} e s r f](#)
[supports technique^{op} grazing incidence small angle scattering](#)
[supports technique^{op} microcrystallography](#)
[supports technique^{op} s a x s](#)
[supports technique^{op} x ray diffraction](#)
[supports technique^{op} x ray fluorescence](#)

ID13 is dedicated to high-spatial-resolution diffraction and scattering experiments using focused monochromatic x-ray beams. Two endstations, a microbranch and a nanobranch, are operated in serial mode.

i d14 1ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID14-1>

has facts

[in facility^{op} e s r f](#)

[supports technique^{op} macromolecular crystallography](#)

i d14 2ⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#ID14-2>

has facts

[in facility^{op} e s r f](#)

[supports technique^{op} macromolecular crystallography](#)

i d14 4ⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#ID14-4>

has facts

[in facility^{op} e s r f](#)

[supports technique^{op} macromolecular crystallography](#)

ID14-4 is a highly automated, undulator-based, tunable beamline dedicated to macromolecular crystallography.

i d15 aⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#ID15A>

has facts

[supports technique^{op} compton scattering](#)

[in facility^{op} e s r f](#)

[supports technique^{op} energy dispersive diffraction](#)

[supports technique^{op} g i s a x s](#)

[supports technique^{op} grazing incidence diffraction](#)

[supports technique^{op} tomography](#)

[supports technique^{op} x ray diffraction](#)

ID15A

i d15 bⁿⁱ

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IRI: <http://www.purl.org/pankos#ID15B>

has facts

[supports technique^{op} compton scattering](#)

[in facility^{op} e srf](#)
[supports technique^{op} x ray diffraction](#)

ID15B is dedicated to diffraction studies of powders, amorphous materials and single crystals, and to high-resolution Compton studies. A high-pressure and high-temperature gas loading system is available for studies of catalyzed reactions.

i d16 b n aⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID16B-NA>

has facts

[in facility^{op} e srf](#)
[supports technique^{op} tomography](#)
[supports technique^{op} x ray diffraction](#)
[supports technique^{op} x ray excited optical luminescence](#)
[supports technique^{op} xas](#)
[supports technique^{op} xrf](#)

Beamline ID16B has a nanoprobe experimental station, which permits nondestructive investigation of spatial distribution, concentration and speciation of trace elements and allow these to be correlated to morphology and crystallographic orientation.

i d16 n iⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID16-NI>

has facts

[supports technique^{op} coherent imaging](#)
[in facility^{op} e srf](#)
[supports technique^{op} micro x rf](#)
[supports technique^{op} phase contrast imaging](#)
[supports technique^{op} scanning transmission x ray microscopy](#)
[supports technique^{op} tomography](#)

The beamline provides a high-brilliance beam focused down to nanometer size, allowing quantitative 3D characterization of the morphology and the elemental composition of specimens in their native state by combining coherent imaging techniques and X-ray fluorescence microscopy.

i d17ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID17>

has facts

[supports technique^{op} diffraction enhanced imaging](#)
[in facility^{op} e srf](#)

[supports technique^{op} imaging](#)
[supports technique^{op} k edge subtraction imaging](#)
[supports technique^{op} microbeam radiation therapy](#)
[supports technique^{op} monochromatic imaging](#)
[supports technique^{op} phase contrast imaging](#)
[supports technique^{op} pink beam imaging](#)
[supports technique^{op} radiography](#)
[supports technique^{op} stereotaxic synchrotron radiation therapy](#)
[supports technique^{op} tomography](#)

ID17 is dedicated to biomedical imaging, radiation biology and radiation therapy; experiments can be run in-vitro or in-vivo in two endstations.

i d18ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID18>

has facts

[in facility^{op} e s r f](#)
[supports technique^{op} nuclear resonance](#)

i d19ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID19>

has facts

[supports technique^{op} diffraction contrast tomography](#)
[in facility^{op} e s r f](#)
[supports technique^{op} laminography](#)
[supports technique^{op} phase contrast imaging](#)
[supports technique^{op} radiography](#)
[supports technique^{op} tomography](#)

ID19 is mainly devoted to 3D imaging (microtomography, laminography), with an intensive use of phase contrast. These techniques are applied to a wide variety of topics, with a present emphasis on palaeontology. This beamline is moving towards higher spatial and temporal resolutions.

i d20ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#ID20>

has facts

[in facility^{op} e s r f](#)
[supports technique^{op} high energy resolution fluorescence detection](#)
[supports technique^{op} non resonantinelastic x ray scattering](#)

[supports technique^{op} resonant inelastic soft x ray scattering](#)

ID20 is dedicated to the study of electronic and magnetic excitations in matter using resonant and non-resonant inelastic X-ray scattering as well as emission spectroscopy. The main scientific activities comprise the investigation of strongly correlated electron systems, functional materials, and the study of matter at extreme conditions.

i d21ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ID21>**has facts**[in facility^{op} e s r f](#)[supports technique^{op} fourier transform infrared spectroscopy](#)[supports technique^{op} micro x ray fluorescence](#)[supports technique^{op} micro x a n e s](#)[supports technique^{op} x ray absorption near edge structure](#)[supports technique^{op} x r f](#)

ID21 comprises two endstations: (a) a scanning X-ray microscope (2-9 keV) optimized for X-ray micro-fluorescence and micro-spectroscopy imaging of elemental distributions and chemical speciation of samples (sub-micron lateral resolution), and (b) an endstation devoted to infrared spectro-microscopy in the mid-infrared range.

i d22ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ID22>**has facts**[supports technique^{op} pair distribution function analysis](#)[supports technique^{op} powder diffraction](#)[supports technique^{op} x r d](#)i d22 n iⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ID22NI>**has facts**[in facility^{op} e s r f](#)[supports technique^{op} phase contrast imaging](#)[supports technique^{op} scanning transmission x ray microscopy](#)[supports technique^{op} tomography](#)[supports technique^{op} x r f](#)i d23 1ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ID23-1>

has facts[in facility^{op} e s r f](#)[supports technique^{op} multi wavelength anomalous dispersion](#)

ID23-1 offers the opportunity to make highly efficient monochromatic measurements at energies from 5 Kev to 20 Kev with a flux of ~1-4 E12 photons/second and a variable beam size from 0.05 to 0.001 mm².

i d23 2ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ID23-2>**has facts**[in facility^{op} e s r f](#)[supports technique^{op} macromolecular crystallography](#)[supports technique^{op} micro beam](#)**ID23-2****i d24ⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ID24>**has facts**[in facility^{op} e s r f](#)[supports technique^{op} extended x ray absorption fine structure](#)[supports technique^{op} x a s](#)[supports technique^{op} x m c d](#)[supports technique^{op} x m l d](#)

ID24 is an energy dispersive EXAFS beamline optimized for time-resolved and extreme conditions x-ray absorption spectroscopy.

i d26ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ID26>**has facts**[in facility^{op} e s r f](#)[supports technique^{op} inelastic x ray scattering](#)[supports technique^{op} x a s](#)[supports technique^{op} x e s](#)**i d27ⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ID27>

has facts

- [in facility^{op} e s r f](#)
- [supports technique^{op} powder diffraction](#)
- [supports technique^{op} x ray diffraction](#)
- [supports technique^{op} x ray raman scattering](#)
- [supports technique^{op} xrf](#)

Beamline ID27 is a premier X-ray powder and single crystal diffraction station (microfocus) primarily dedicated to research at extreme pressures and temperatures.

[i d28ⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#ID28>

has facts

- [in facility^{op} e s r f](#)
- [supports technique^{op} g i d](#)
- [supports technique^{op} ixs](#)

ID28 is dedicated to the study of phonon dispersion in condensed matter at momentum transfers, Q, and energy transfers, E, characteristic of collective atom motions. Main activities comprise the study of disordered systems and samples only available in very small quantities (<<1 mm³) and/or submitted to very high pressures (100 GPa and beyond).

[i d29ⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#ID29>

has facts

- [in facility^{op} e s r f](#)
- [supports technique^{op} m a d](#)
- [supports technique^{op} macromolecular crystallography](#)

ID29 is a fully automated macromolecular crystallography beamline, intended for high-energy-resolution anomalous dispersion phasing experiments and for high-resolution X-ray diffraction experiments.

[i d31ⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#ID31>

has facts

- [supports technique^{op} anomalous scattering](#)
- [in facility^{op} e s r f](#)
- [supports technique^{op} g i d](#)
- [supports technique^{op} pair distribution function analysis](#)

[supports technique^{op}](#) [powder diffraction](#)

[supports technique^{op}](#) [x ray diffraction](#)

[supports technique^{op}](#) [x rr](#)

i d32ⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#ID32>

has facts

[in facility^{op}](#) [esrf](#)

[supports technique^{op}](#) [ixs](#)

[supports technique^{op}](#) [x ray linear dichroism](#)

[supports technique^{op}](#) [xanes](#)

[supports technique^{op}](#) [xas](#)

[supports technique^{op}](#) [xes](#)

[supports technique^{op}](#) [xmcd](#)

[supports technique^{op}](#) [xmlid](#)

XMC branch with plane grating monochromator and variable spot size at the sample. RIXS branch with very high resolving power (aim combined RP=30000) and 10m spectrometer with constant variable scattering angle over 100 degrees. Open experimental area with the possibility of installing user chambers or using beamline instruments for example for soft x-ray diffraction or coherence experiments

i l lⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#ILL>

Institut Laue-Langevin

belongs to

[neutron source^c](#)

has facts

[has instrument^{op}](#) [brisep](#)

[has instrument^{op}](#) [cyclops](#)

[has instrument^{op}](#) [cryodem](#)

[has instrument^{op}](#) [d10](#)

[has instrument^{op}](#) [d11](#)

[has instrument^{op}](#) [d16](#)

[has instrument^{op}](#) [d17](#)

[has instrument^{op}](#) [d19](#)

[has instrument^{op}](#) [d1b](#)

[has instrument^{op}](#) [d20](#)

[has instrument^{op}](#) [d22](#)

[has instrument^{op}](#) [d23](#)

[has instrument^{op}](#) [d2b](#)

[has instrument^{op}](#) [d33](#)

[has instrument^{op} d4](#)
[has instrument^{op} d7](#)
[has instrument^{op} d9](#)
[has instrument^{op} f i g a r o](#)
[has instrument^{op} g r a n i t](#)
[has instrument^{op} i n10](#)
[has instrument^{op} i n11](#)
[has instrument^{op} i n13](#)
[has instrument^{op} i n15](#)
[has instrument^{op} i n16 b](#)
[has instrument^{op} i n20](#)
[has instrument^{op} i n3](#)
[has instrument^{op} i n4 c](#)
[has instrument^{op} i n5](#)
[has instrument^{op} i n6](#)
[has instrument^{op} l a d i i i](#)
[has instrument^{op} orient express](#)
[has instrument^{op} p f1 b](#)
[has instrument^{op} p f2](#)
[has instrument^{op} p n1](#)
[has instrument^{op} p n3](#)
[has instrument^{op} s18](#)
[has instrument^{op} s a l s a](#)
[has instrument^{op} super a d a m](#)
[has instrument^{op} v i v a l d i](#)

The Institut Laue-Langevin is an international research centre at the leading edge of neutron science and technology.

As the world's flagship centre for neutron science, the ILL provides scientists with a very high flux of neutrons feeding some 40 state-of-the-art instruments, which are constantly being developed and upgraded.

As a service institute the ILL makes its facilities and expertise available to visiting scientists. Every year, some 1500 researchers from over 40 countries visit the ILL. More than 800 experiments selected by a scientific review committee are performed annually. Research focuses primarily on fundamental science in a variety of fields: condensed matter physics, chemistry, biology, nuclear physics and materials science, etc.

i m a tⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#IMAT>

has facts

[supports technique^{op} imaging](#)
[supports technique^{op} neutron diffraction](#)
[has operation status^{op} under construction](#)

i n e sⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#INES>

belongs to

[neutron diffractometer^c](#)

has facts

[in facility^{op} i s i s](#)

[has operation status^{op} operational](#)

[supports technique^{op} powder diffraction](#)

INES is a powder diffractometer, built and managed by the Italian National Research Council (CNR) within the cooperation agreement with STFC.

i n t e rⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#INTER>

belongs to

[reflectometer^c](#)

has facts

[in facility^{op} i s i s](#)

[has operation status^{op} operational](#)

[supports technique^{op} reflectometry](#)

Inter is a high-intensity chemical interfaces reflectometer offering a unique facility for the study of a range of air/liquid, liquid/liquid, air/solid, and liquid/solid interfaces.

i n1ⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#IN1>

belongs to

[three axis spectrometer^c](#)

i n10ⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#IN10>

Cold neutron backscattering spectrometer IN10

belongs to

[back scattering spectrometer^c](#)

has facts

[supports technique^{op} elastic neutron scattering spectroscopy](#)

[has resolution level^{op} high resolution](#)

[in facility^{op} i_11](#)[supports technique^{op} inelastic neutron scattering spectroscopy](#)

The IN10 backscattering spectrometer is designed for inelastic or quasielastic scattering experiments requiring very high energy resolution and moderate momentum transfer resolution. IN10 owes its high energy resolution to the use of nearly perfect backscattering both at the monochromator and at the analyser crystals.

i n11ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IN11>

Spin-Echo Spectrometer IN11

belongs to[spin echo spectrometer^c](#)**has facts**[has resolution level^{op} high resolution](#)[in facility^{op} i_11](#)[supports technique^{op} spin echo s a n s](#)

The instrument IN11 is primarily used to study slow relaxation phenomena in polymers, glasses or magnetic materials. Other applications are elastic paramagnetic scattering and the determination of phonon linewidths.

i n12ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IN12>**belongs to**[three axis spectrometer^c](#)**i n13ⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IN13>

CRG - thermal neutron backscattering spectrometer IN13

belongs to[neutron spectrometer^c](#)**has facts**[supports technique^{op} back scattering spectroscopy](#)[has resolution level^{op} high resolution](#)[in facility^{op} i_11](#)[supports technique^{op} to f spectroscopy](#)

Because of its high energy resolution and high momentum transfer the backscattering spectrometer IN13 (CRG) is particularly useful for the microscopic study of single particle

motions (jump reorientation, rotational and translational diffusion, tunnelling) observed by incoherent neutron scattering.

i n14ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#IN14>

belongs to

[three axis spectrometer^c](#)

i n15ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#IN15>

Spin-echo spectrometer with time-of-flight option and focussing option

belongs to

[spin echo spectrometer^c](#)

has facts

[has resolution level^{op} high resolution](#)

[in facility^{op} i II](#)

[supports technique^{op} spin echo small angle neutron scattering](#)

IN15 is a high energy and momentum resolution spin-echo spectrometer optimised for quasielastic small angle scattering. This instrument is developed and financed jointly by the ILL, FZ Jülich and HMI Berlin.

i n16 bⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#IN16B>

belongs to

[neutron spectrometer^c](#)

has facts

[supports technique^{op} back scattering spectroscopy](#)

[in facility^{op} i II](#)

IN16B, a sub-micro-eV energy resolution backscattering spectrometer with a very high count rate and wide dynamic range

i n20ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#IN20>

Thermal neutron three-axis spectrometer with polarisation analysis

belongs to

[three axis spectrometer^c](#)**has facts**[in facility^{op} i_11](#)

IN20 is a thermal beam three-axis spectrometer for inelastic scattering experiments in various sample environments (eg. magnets up to

15 T). It can be equipped with single-analyser-detector or Flatcone (an inclinable multianalyser-detector to study energy cuts in, above and below

the central reciprocal scattering plane), with standard Helmholtz and CRYOPAD (zero-field) polarisation analysis and for high-resolution linewidth studies of dispersionless excitations using the spin-echo technique (TASSE).

i n22ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IN22>**belongs to**[three axis spectrometer^c](#)**i n3ⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IN3>**belongs to**[test instrument^c](#)**has facts**[in facility^{op} i_11](#)**i n4 cⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IN4C>**belongs to**[time of flight spectrometer^c](#)**has facts**[in facility^{op} i_11](#)[supports technique^{op} time of flight s a n s](#)

IN4 is a high-flux time-of-flight spectrometer used for the study of excitations in condensed matter. It works in the thermal neutron energy range (10-100 meV).

i n5ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IN5>

belongs to[time of flight spectrometer^c](#)**has facts**[in facility^{op} i l l](#)[supports technique^{op} time of flight s a n s](#)

IN5B is a high precision direct geometry Time-of-flight (ToF) spectrometer. It is used to study low-energy transfer processes as a function of momentum transfer.

i n6ⁿⁱback to [ToC](#) or [Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IN6>**belongs to**[time of flight spectrometer^c](#)**has facts**[in facility^{op} i l l](#)[supports technique^{op} time of flight s a n s](#)i n8ⁿⁱback to [ToC](#) or [Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IN8>**belongs to**[three axis spectrometer^c](#)i rⁿⁱback to [ToC](#) or [Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IR>**has facts**[supports technique^{op} infrared micro spectroscopy](#)[in facility^{op} s l s](#)i r i sⁿⁱback to [ToC](#) or [Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IRIS>**belongs to**[neutron spectrometer^c](#)**has facts**[in facility^{op} i s i s](#)[supports technique^{op} neutron spectroscopy](#)[has operation status^{op} operational](#)

IRIS is a time-of-flight inverted-geometry crystal analyser spectrometer designed for quasi-

elastic and low-energy high resolution inelastic spectroscopy.

Neutrons scattered from the sample are energy-analysed by means of Bragg reflection from one of two large single crystal arrays (pyrolytic graphite and muscovite mica) in close to backscattering geometry. Each analyser is associated with its own bank of 51 ZnS scintillator detectors. The two analyser banks, which can operate simultaneously, afford high resolution over wide energy and momentum transfer ranges.

i r i s t hz/ infrared dipole beamlineⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#IRISTHz/InfraredDipoleBeamline>

has facts

[supports technique^{op}](#) [i r microscopy](#)

[supports technique^{op}](#) [i r spectroscopy](#)

i r microscopyⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#IRMicroscopy>

belongs to

[technique^c](#)

i r spectroscopyⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#IRSpectroscopy>

belongs to

[technique^c](#)

is same as

[infra red spectroscopy](#)

i s i sⁿⁱ

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IRI: <http://www.purl.org/pankos#ISIS>

belongs to

[neutron source^c](#)

has facts

[has instrument^{op}](#) [a l f](#)

[has instrument^{op}](#) [a r g u s](#)

[has instrument^{op}](#) [c h i p i r](#)

[has instrument^{op}](#) [c r i s p](#)

[has instrument^{op}](#) [d e v a](#)

[has instrument^{op}](#) [e m u](#)

[has instrument^{op}](#) [e n g i n x](#)

[has instrument^{op}](#) [e x e e d](#)

[has instrument^{op} f i r e s](#)
[has instrument^{op} g e m](#)
[has instrument^{op} h e t](#)
[has instrument^{op} h i f i](#)
[has instrument^{op} h r p d](#)
[has instrument^{op} i m a t](#)
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[has instrument^{op} p o l r e f](#)
[has instrument^{op} r o t a x](#)
[has instrument^{op} s a n d a l s](#)
[has instrument^{op} s a n s 2 d](#)
[has instrument^{op} s u r f](#)
[has instrument^{op} s x d](#)
[has instrument^{op} t o s c a](#)
[has instrument^{op} v e s u v i o](#)
[has instrument^{op} w i s h](#)
[has instrument^{op} z o o m](#)

ISIS is a world-leading centre for research in the physical and life sciences at the STFC Rutherford Appleton Laboratory near Oxford in the United Kingdom. Our suite of neutron and muon instruments gives unique insights into the properties of materials on the atomic scale.

We support a national and international community of more than 3000 scientists for research into subjects ranging from clean energy and the environment, pharmaceuticals and health care, through to nanotechnology and materials engineering, catalysis and polymers, and on to fundamental studies of materials.

i s i s sⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#ISISS>

has facts

[supports technique^{op} in situ spectroscopy](#)

[i u v sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IUVS>**has facts**[supports technique^{op} inelastic x ray scattering](#)

The IUVS beamline is devoted to the study of inelastic scattering with ultraviolet radiation, in a time-space domain not accessible at present by other facilities.

[i x sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#IXS>**belongs to**[technique^c](#)**is same as**[inelastic x ray scattering](#)[i02ⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#I02>**belongs to**[m x instrument^c](#)**has facts**[in facility^{op} diamond](#)[supports technique^{op} humidity control](#)[supports technique^{op} mad](#)[supports technique^{op} macromolecular crystallography](#)[supports technique^{op} spectroscopy](#)

High throughput and highly automated beamline for optimised MAD and SAD experiments.

[i03ⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#I03>**belongs to**[m x instrument^c](#)**has facts**[in facility^{op} diamond](#)[i04ⁿⁱ](#)[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I04>

belongs to

[m x instrument^c](#)

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} humidity control](#)
- [supports technique^{op} mad](#)
- [supports technique^{op} macromolecular crystallography](#)
- [supports technique^{op} spectroscopy](#)

High throughput and highly automated beamline for optimised MAD and SAD experiments.

i04 1ⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#I04-1>

belongs to

[m x instrument^c](#)

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} humidity control](#)
- [supports technique^{op} macromolecular crystallography](#)

High throughput and highly automated fixed wavelength SAD beamline for macromolecular crystallography.

i05ⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#I05>

has facts

- [supports technique^{op} angle resolved photoemission spectroscopy](#)
- [in facility^{op} diamond](#)

I05-ARPES is a facility dedicated to the study of electronic structures of solids and their surfaces by Angle-Resolved Photoemission Spectroscopy (ARPES). The ultrahigh vacuum low temperature high resolution ARPES end station is served by an intense, highly monochromatic VUV to XUV photon beam from a variable polarisation Apple II undulator.

i06ⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#I06>

has facts

- [in facility^{op} diamond](#)

- [supports technique^{op} x ray absorption spectroscopy](#)
- [supports technique^{op} x ray magnetic circular dichroism](#)
- [supports technique^{op} x ray magnetic linear dichroism](#)

I06 is a microfocus soft-X-ray beamline for X-ray photoelectron microscopy. It can be used to study nanostructures significant for sensors, catalysts and magnetic materials and nanoscale devices.

i07ⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#I07>

belongs to

- [Instrument^c](#)

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} grazing incidence x ray diffraction](#)
- [supports technique^{op} grazing small angle x ray scattering](#)
- [supports technique^{op} surface x ray diffraction](#)
- [supports technique^{op} x ray reflectivity](#)

I07 is a high-resolution X-ray diffraction beamline for investigating the structure of surfaces and interfaces under different environmental conditions, including, for example, semiconductors and biological films.

i08ⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#I08>

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} x ray fluorescence](#)

Scanning X-ray Microscopy with variety of imaging and spectromicroscopy modes: Transmission incl. absorption and phase-sensitive contrasts, X-ray fluorescence as well as soft X-ray diffraction imaging (ptychography).

i09ⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#I09>

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} x ray absorption spectroscopy](#)
- [supports technique^{op} x ray photoelectron spectroscopy](#)
- [supports technique^{op} xps](#)

I09 is designed to provide both soft and hard X-rays for high-resolution studies of atomic and electronic structures of surfaces and interfaces using photoelectron spectroscopy, near edge X-ray absorption fine structure, X-ray standing waves and photoelectron diffraction.

i10ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I10>

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} soft x ray resonant scattering](#)
- [supports technique^{op} x ray absorption spectroscopy](#)
- [supports technique^{op} x ray magnetic circular dichroism](#)
- [supports technique^{op} x ray magnetic linear dichroism](#)

I10 is a beamline for the study of electronic and magnetic structure using soft X-ray resonant scattering (reflection and diffraction) and X-ray absorption. It allows a broad range of studies focused on the spectroscopic properties and magnetic ordering of novel nanostructured systems

i12ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I12>

belongs to

- [Instrument^c](#)

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} single crystal diffraction](#)
- [supports technique^{op} small angle x ray scattering](#)
- [supports technique^{op} small molecule diffraction](#)
- [supports technique^{op} x ray diffraction imaging](#)

I12 is a high-energy beamline principally for Material Science, Engineering and Processing Science. However, other disciplines are also able to take advantage of the beamline's high energies and open architecture. The instrument's main focus is to allow in-situ studies of samples in environments as close as possible to real world environments using imaging, tomography, diffraction and small-angle scattering. I12 is particularly well suited to study large or dense objects and offers a unique sample and environment installation facility for weights up to 2000 kg.

i13ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I13>

belongs to

- [Instrument^c](#)

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} phase contrast imaging](#)
- [supports technique^{op} tomography](#)

I13 is Diamond's longest beamline, dedicated to imaging, tomographic and coherence experiments across the biological, medical, geological, material, engineering and archealogical sciences.

i15ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#I15>**belongs to**

- [Instrument^c](#)

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} pair distribution function](#)
- [supports technique^{op} powder diffraction](#)
- [supports technique^{op} small molecule diffraction](#)
- [supports technique^{op} x ray powder diffraction](#)

I15 is a high energy beamline for single-crystal and powder diffraction. Researchers use it for studying materials under extreme conditions, at high-pressure and high- or low-temperatures. Examples include studying the Earth's core and mantle and planetary interiors, very hard materials, electronic materials and biology in extreme environments.

i16ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#I16>**has facts**

- [in facility^{op} diamond](#)
- [supports technique^{op} resonant diffraction](#)

The Materials and Magnetism beamline provides a unique, world-class single crystal X-ray diffraction facility for studying a diverse range of materials.

i18ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#I18>**has facts**

- [in facility^{op} diamond](#)
- [supports technique^{op} x ray absorption spectroscopy](#)
- [supports technique^{op} x ray fluorescence](#)

B18 is a general purpose EXAFS beamline. The Core-EXAFS is used for an extensive range of studies and applications, including local structure and electronic state of active components, and the study of materials including fluids, crystalline and non-crystalline (amorphous phases & colloids) solids, surfaces and biomaterials.

i19ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I19>

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} powder diffraction](#)

i20ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I20>

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} x ray absorption spectroscopy](#)
- [supports technique^{op} x ray emission spectroscopy](#)

i21ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I21>

belongs to

- [Instrument^c](#)

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} s a x s](#)
- [supports technique^{op} w a x s](#)

i22ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I22>

has facts

- [in facility^{op} diamond](#)
- [supports technique^{op} small angle x ray scattering](#)

i23ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#I23>

belongs to

[Instrument^c](#)**has facts**[in facility^{op} diamond](#)[supports technique^{op} macromolecular crystallography](#)

The long-wavelength macromolecular crystallography beamline I23 is a unique facility for solving the crystallographic phase problem, using the small anomalous signals from sulphur or phosphorous which are present in native protein or RNA/DNA crystals.

i24ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#I24>**belongs to**[mx instrument^c](#)**has facts**[in facility^{op} diamond](#)**imagingⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Imaging>**belongs to**[technique^c](#)**is also defined as**[class](#)**imaging diffractionⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ImagingDiffraction>**belongs to**[diffraction^c](#)**imaging x ray photoelectron spectroscopyⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ImagingX-rayPhotoelectronSpectroscopy>**belongs to**[technique^c](#)**in situ magnetron sputteringⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#In-situMagnetronSputtering>**belongs to**

[technique^c](#)

[in situ spectroscopyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#InSituSpectroscopy>

belongs to

[technique^c](#)

[in situ surface diffractionⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#In-situSurfaceDiffraction>

belongs to

[technique^c](#)

is same as

[s.d](#)

[in situ x ray diffractionⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#In-situX-RayDiffraction>

belongs to

[technique^c](#)

[inelastic neutron scattering spectroscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#InelasticNeutronScatteringSpectroscopy>

belongs to

[neutron spectroscopy^c](#)

[technique^c](#)

[inelastic x ray s a x sⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#InelasticX-RaySAXS>

belongs to

[small angle x ray scattering^c](#)

[technique^c](#)

[inelastic x ray scatteringⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#InelasticX-RayScattering>

belongs to

[technique^c](#)

is same as

[i xs](#)

[infra red spectroscopyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#InfraRedSpectroscopy>

belongs to

[technique^c](#)

is same as

[i r spectroscopy](#)

[infraredⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#Infrared>

belongs to

[technique^c](#)

[infrared absorption spectroscopyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#InfraredAbsorptionSpectroscopy>

belongs to

[technique^c](#)

[infrared micro spectroscopyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#InfraredMicroSpectroscopy>

belongs to

[spectroscopy^c](#)

[j c n sⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#JCNS>

belongs to

[neutron source^c](#)

[k edge subtraction imagingⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#K-edgeSubtractionImaging>

belongs to

[technique^c](#)[k m c 1ⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#KMC-1>**has facts**

- [supports technique^{op} e x a f s](#)
- [supports technique^{op} h a x p e s](#)
- [supports technique^{op} high kinetic energy photoelectron spectroscopy](#)
- [supports technique^{op} n e x a f s](#)
- [supports technique^{op} reflectometry](#)
- [supports technique^{op} x a n e s](#)

[k m c 2ⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#KMC-2>**has facts**

- [supports technique^{op} e x a f s](#)
- [supports technique^{op} x ray fluorescence](#)
- [supports technique^{op} x a n e s](#)

[k m c 3ⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#KMC-3>**has facts**

- [supports technique^{op} e x a f s](#)
- [supports technique^{op} x a n e s](#)

[l a d i i iⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#LADI-III>

Quasi-Laue diffractometer LADI-III

belongs to

- [large scale diffractometer^c](#)
- [quasi laue diffractometer^c](#)

has facts

- [in facility^{op} i l l](#)
- [supports technique^{op} single crystal diffraction](#)

The quasi-Laue diffractometer LADI-III is mainly used for single-crystal studies of macromolecules at high resolution (1.5 - 2.5 Å) in order to locate individual protons or deuterons of special interest, water structures or other small molecules that can be marked

with deuterium to be particularly visible. The complexity of systems that can be studied can reach about 150 Å on cell edge and the sample volumes required can be as low as 0.05 mm³.

Larmorⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#LARMOR>

has facts

- [supports technique^{op} small angle neutron scattering](#)
- [has operation status^{op} under construction](#)

The Larmor instrument will implement a number of sophisticated and recently developed techniques based on the application and extension of the neutron spin-echo concept in a single instrument. This multi-purpose instrument for SANS, diffraction and spectroscopy relies on the Larmor precession of polarised neutrons and will be able to measure changes in materials ranging from 0.1 femtometres up to 20mm

LEMⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#LEM>

has facts

- [supports technique^{op} muon spin spectroscopy](#)

LETⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#LET>

belongs to

- [neutron spectrometer^c](#)

has facts

- [in facility^{op} ISIS](#)
- [supports technique^{op} neutron diffraction](#)
- [has operation status^{op} operational](#)

LET is a cold neutron multi-chopper spectrometer for the study of dynamics in condensed matter to understand the microscopic origin of material properties.

LILITⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#LILIT>

has facts

- [supports technique^{op} x ray lithography](#)

LILIT is devoted to the fabrication, by means of X-ray lithography, of structures at micro and

nano resolution level, taking advantage of the high brilliance and wide X-ray domain spectrum of Elettra. The main feature of this beamline is the wide lithographic window achieved by combining high-pass (beryllium window) and low-pass (mirrors at increasing angle of incidence) filters; this allows the continuous change of the spectral range of interest from the soft to hard X-ray region.

I m xⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#LMX>

has facts

[supports technique^{op}](#) [single crystal diffraction](#)

[has operation status^{op}](#) [under proposal](#)

LMX is an innovative single crystal neutron diffractometer that will provide a high flux cold neutron solution for problems in large molecule chemical and biological structure.

I o qⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#LOQ>

belongs to

[s a n s instrument^c](#)

has facts

[in facility^{op}](#) [i s i s](#)

[has operation status^{op}](#) [operational](#)

[supports technique^{op}](#) [small angle neutron scattering](#)

LOQ is a relatively simple instrument, consisting of an 11-metre evacuated beamline down which neutrons fly towards the sample. After being scattered by the sample, they hit a fixed two-dimensional detector 4 metres away, which can detect the positions and times of arrival of the neutrons. The resulting pattern is analysed to provide information on the nanostructure of the sample.

I t fⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#LTF>

has facts

[supports technique^{op}](#) [muon spin spectroscopy](#)

I u c i aⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#LUCIA>

belongs to

[Instrument^c](#)

has facts

[supports technique^{op}](#) [micro x as](#)

[supports technique^{op}](#) [micro xrf](#)

[in facility^{op}](#) [soleil](#)

The beamline "LUCIA" (Line for Ultimate Characterisation by Imaging and Absorption) is a "tender" (0.8-8 keV) X-ray microprobe with capabilities for chemical speciation by x-ray absorption spectroscopy (micro XAS) and for elemental mapping by x-ray micro-fluorescence (micro XRF). It allows the possibility to measure heterogeneous samples at a micronic size and to combine these two element-specific and non-destructive techniques.

[laminographyⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#Laminography>

belongs to

[technique^c](#)

[laue diffractionⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#LaueDiffraction>

belongs to

[technique^c](#)

[litho e u vⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#Litho-EUV>

belongs to

[technique^c](#)

[low energyⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#LowEnergy>

belongs to

[low engergy^c](#)

[low pressureⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#LowPressure>

belongs to

[low pressure^c](#)

is disjoint with

[high pressure](#), [medium pressure](#)

is also defined as
[class](#)

[low resolutionⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#LowResolution>

belongs to

[low resolution^c](#)

is disjoint with

[high resolution](#), [medium resolution](#)

is also defined as

[class](#)

[luminescenceⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#Luminescence>

belongs to

[technique^c](#)

is also defined as

[class](#)

[m a dⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#MAD>

belongs to

[technique^c](#)

is same as

[multi wavelength anomalous dispersion](#)

[m a p sⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#MAPS>

belongs to

[neutron spectrometer^c](#)

has facts

[in facility^{op}](#) [i s i s](#)

[supports technique^{op}](#) [neutron diffraction](#)

[has operation status^{op}](#) [operational](#)

Maps has changed the way the neutron community thinks about inelastic neutron scattering.

Its huge array of position sensitive detectors has created a survey technique that is able to map vast areas of the Brillouin zone, making it possible to see the unexpected. It is able to reveal broad features which could easily be dismissed as background on a triple-axis

machine.

m a r iⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#MARI>

belongs to

[neutron spectrometer^c](#)

has facts

[in facility^{op} i s i s](#)

[supports technique^{op} neutron spectroscopy](#)

[has operation status^{op} operational](#)

Mari is a chopper spectrometer with continuous detector bank coverage ranging from 3° to 134° degrees.

Mari is a uniquely versatile instrument and has contributed seminal work in fields such as quantum-fluids, the dynamics of disordered materials and low-dimensional magnetism. It is also used for studies of biological and polymeric materials, catalysts, thermo-electric materials, geological samples, high-temperature superconductors and liquid dynamics.

m a r sⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#MARS>

has facts

[supports technique^{op} micro xrf](#)

[in facility^{op} soleil](#)

[supports technique^{op} w a x s](#)

[supports technique^{op} xrd](#)

MARS beamline is aiming to extend the research capabilities on radioactive matter (α , β , γ and n emitters) towards the use of synchrotron radiation in multidisciplinary fields (biology, chemistry, physics) with respect to safety national and European laws. This beamline is listed under authorization from ASN (French Authority for Nuclear Security).

m c xⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#MCX>

has facts

[supports technique^{op} x ray diffraction](#)

The Materials Characterisation by X-ray diffraction (MCX) beamline allows to perform a wide range of non-single crystal diffraction experiments: grazing angle diffraction and reflectivity, residual stress and texture analysis, phase identification and structural studies and kinetic studies . Systems that can be investigated vary from organic and inorganic thin films, to thermally and/or mechanically modified surfaces of mechanic components, to polymers,

catalysts and highly disordered materials in the form of films, powders, fibers.

merlinⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#MERLIN>

belongs to

[neutron spectrometer](#)^c

has facts

[in facility](#)^{op} [isis](#)

[supports technique](#)^{op} [neutron spectroscopy](#)

[has operation status](#)^{op} [operational](#)

Merlin is a high count rate, medium energy resolution, direct geometry chopper spectrometer.

MERLIN has an m=3 supermirror guide to enhance flux as well as a massive π steradians of detector solid angle with an angular range from -45 to +135 degrees in the horizontal plane and ± 30 degrees in the vertical plane. The detectors are 3m long position sensitive detectors placed in the tank vacuum to eliminate gaps in the coverage, making it ideal for both single crystal and powder/liquid users. The guide extends the dynamic range of the instrument allowing the study of excitations from a few meV to hundreds of meV.

metrologieⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#METROLOGIE>

has facts

[supports technique](#)^{op} [optics](#)

[in facility](#)^{op} [soleil](#)

[supports technique](#)^{op} [vuv](#)

The objectives of this project are to design and install at the SOLEIL synchrotron radiation source a metrology test facility for the R&D of optical components and detectors. We propose to build, on a bending magnet, three optical branches dedicated to VUV, soft X-rays and hard X-rays energy ranges to cover few eV to 28 keV. This installation will first address the needs of the SOLEIL experimental groups (Optics and Detectors) and will be used by a large community. This beamline will also be valuable as a general-purpose beamline to prepare, test and set up a wide range of experiments.

minaxⁿⁱ

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IRI: <http://www.purl.org/pankos#MINAX>

has facts

[supports technique](#)^{op} [energy dispersive diffraction](#)

[supports technique](#)^{op} [microfocus x ray scattering](#)

[supports technique](#)^{op} [nanofocus x ray scattering](#)

[supports technique](#)^{op} [usaxs](#)

m o k eⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MOKE>**belongs to**[technique^c](#)**is same as**[magnetic optical kerr effect](#)**m o r p h e u sⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MORPHEUS>**has facts**[supports technique^{op} reflectometry](#)**m sⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MS>

Materials Science

has facts[supports technique^{op} in situ surface diffraction](#)[supports technique^{op} powder diffraction](#)[in facility^{op} s l s](#)**m u s rⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MUSR>**belongs to**[muon spectrometer^c](#)**has facts**[in facility^{op} i s i s](#)[supports technique^{op} muon spectroscopy](#)[has operation status^{op} operational](#)

MuSR is a 64-detector μ SR spectrometer which can be rotated through 90° to enable both longitudinal and transverse measurements to be made. Fields of up to 2500 G can be applied, and sample temperatures in the range of 40mK to 1000K can be produced using a variety of sample environment equipment.

m x b e a m l i n e 14.1ⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** http://www.purl.org/pankos#MX_BEAMLINE_14.1

has facts

[supports technique^{op}](#) [macromolecular crystallography](#)

[mx beamline 14.2ⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: http://www.purl.org/pankos#MX_BEAMLINE_14.2

has facts

[supports technique^{op}](#) [macromolecular crystallography](#)

[mx beamline 14.3ⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: http://www.purl.org/pankos#MX_BEAMLINE_14.3

has facts

[supports technique^{op}](#) [macromolecular crystallography](#)

[macromolecular crystallographyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#MacromolecularCrystallography>

belongs to

[technique^c](#)

[magnetic optical kerr effectⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#MagneticOpticalKerrEffect>

belongs to

[technique^c](#)

is same as

[m o k e](#)

[magnetic spectroscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#MagneticSpectroscopy>

belongs to

[technique^c](#)

[marsⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#mars>

has facts

[supports technique^{op}](#) [triple axis spectroscopy](#)

[mass separator spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MassSeparatorSpectroscopy>**belongs to**[neutron spectroscopy^c](#)[mass spectrometryⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MassSpectrometry>**belongs to**[technique^c](#)[materials science beamlineⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MaterialsScienceBeamline>**has facts**[supports technique^{op} \[near edge x ray absorption fine structure spectroscopy\]\(#\)](#)[supports technique^{op} \[resonant photoemission\]\(#\)](#)

The MSB (Materials Science Beamline) is a versatile beamline suitable for experiments in materials science, surface physics, catalysts and organic molecules on various surfaces. The tunability of the photon energy over a wide range (22 - 1000 eV) with mainly linearly polarized light from a bending magnet source offers "classical" UPS and XPS with high energy resolution and tunable excitation energy for the best photoionization cross sections.

[medium engergyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MediumEngergy>**belongs to**[medium energy^c](#)[medium pressureⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MediumPressure>**belongs to**[medium pressure^c](#)**is disjoint with**[high pressure, low pressure](#)**is also defined as**[class](#)

[medium resolutionⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#MediumResolution>**belongs to**[medium resolution^c](#)**is disjoint with**[high resolution, low resolution](#)**is also defined as**[class](#)[miccro g i s a x s tomographyⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#MiccroGISAXSTomography>**belongs to**[x ray imaging^c](#)[micro beamⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#MicroBeam>**belongs to**[technique^c](#)[micro powder diffractionⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#MicroPowderDiffraction>**belongs to**[technique^c](#)[micro s a x s tomographyⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#MicroSAXSTomography>**belongs to**[x ray imaging^c](#)[micro tomographyⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#MicroTomography>**belongs to**[technique^c](#)

[micro x a n e sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MicroXANES>**belongs to**[technique^c](#)**is same as**[micro x ray absorption near edge structure](#)[micro x a sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MicroXAS>

Environmental and Materials Sciences

belongs to[technique^c](#)**is same as**[f e m t o, micro x ray absorption spectroscopy](#)**has facts**[in facility^{op} s l s](#)[supports technique^{op} x a s](#)[supports technique^{op} x r f](#)[micro x r fⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MicroXRF>**belongs to**[technique^c](#)**is same as**[micro x ray fluorescence](#)[micro x ray absorption near edge structureⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MicroX-RayAbsorptionNear-edgeStructure>**belongs to**[technique^c](#)**is same as**[micro x a n e s](#)[micro x ray absorption spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MicroX-RayAbsorptionSpectroscopy>

is same as

[micro x a s](#)

[micro x ray fluorescenceⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#MicroX-RayFluorescence>

belongs to

[fluorescence luminescence^c](#)

[technique^c](#)

is same as

[micro x rf](#)

[microbeam radiation therapyⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#MicrobeamRadiationTherapy>

belongs to

[technique^c](#)

[microcrystallographyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#Microcrystallography>

belongs to

[technique^c](#)

[microdiffraction imaging beamlineⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#MicrodiffractionImagingBeamline>

has facts

[in facility^{op} e s r f](#)

[supports technique^{op} x ray diffraction](#)

[microfocus x ray scatteringⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#MicrofocusX-RayScattering>

belongs to

[scattering^c](#)

[microforcus spectroscopyⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#MicroforcusSpectroscopy>

belongs to[technique^c](#)[microscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Microscopy>**belongs to**[technique^c](#)**is also defined as**[class](#)[MISTRALⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MISTRAL>**has facts**[supports technique^{op} \[x ray microscopy\]\(#\)](#)

The full-field Transmission X-ray Microscopy beamline MISTRAL is one of the seven phase-I beamlines at ALBA. It is devoted to cryo nano-tomography in the water window and multi-keV spectral regions (E= 270 eV–2600 eV) for biological applications. In addition, spectroscopic imaging (a series of 2D images over a range of X-ray wavelengths) at several interesting X-ray absorption edges can be performed.

[monochromatic imagingⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MonochromaticImaging>**belongs to**[technique^c](#)[multi wavelength anomalous dispersionⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Multi-wavelengthAnomalousDispersion>**belongs to**[technique^c](#)**is same as**[m a d](#)[muon spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MuonSpectroscopy>**belongs to**[spectroscopy^c](#)

[muon spin spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#MuonSpinSpectroscopy>**belongs to**[technique^c](#)[nanoscopiumⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NANOSCOPIUM>**has facts**

- [supports technique^{op} phase contrast imaging](#)
- [in facility^{op} soleil](#)
- [supports technique^{op} xas](#)
- [supports technique^{op} xrf](#)

The Nanoscopium long beamline will work in the 5-20 keV energy range. This multimodal beamline will be dedicated to scanning X-ray micro- and nanoprobe experiments in the 30 nm -1 µm spatial resolution range by combining X-ray fluorescence (XRF), absorption spectroscopy (XAS), and phase-contrast imaging. The coherence characteristics of the X-ray beam will be exploited by implementing coherent diffraction imaging techniques. This will offer unique research possibilities via 2D/3D quantitative elemental, chemical, and structural analysis for several research fields, such as microelectronics and materials, biomedical, geo-biological and environmental sciences.

[narzissⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NARZISS>**has facts**[supports technique^{op} reflectometry](#)[neutraⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NEUTRA>**has facts**[supports technique^{op} neutron transmission radiography](#)[nexafsⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NEXAFS>**belongs to**[technique^c](#)

is same as[near edge x ray absorption fine structure spectroscopy](#)**n i m r o dⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NIMROD>**belongs to**[neutron diffractometer^c](#)[s a n s instrument^c](#)**has facts**[in facility^{op} i s i s](#)[supports technique^{op} neutron diffraction](#)[has operation status^{op} operational](#)

Nimrod is a near and intermediate range order diffractometer designed to provide continuous access to length scales ranging from the interatomic (<1 Å) through to the mesoscopic (>300 Å).

n i x sⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NIXS>**belongs to**[technique^c](#)**is same as**[non resonantinelastic x ray scattering](#)**n r sⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NRS>**belongs to**[technique^c](#)**is same as**[nuclear resonant scattering](#)**nano a r p e sⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Nano-ARPES>**belongs to**[technique^c](#)**nano x a sⁿⁱ**[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#NanoXAS>

has facts

- [in facility^{op} s l s](#)
- [supports technique^{op} scanning probe microscopy](#)
- [supports technique^{op} scanning transmission x ray microscopy](#)

NanoESCAⁿⁱ

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IRI: <http://www.purl.org/pankos#NanoESCA>

has facts

- [supports technique^{op} electron spectroscopy](#)
- [supports technique^{op} imaging x ray photoelectron spectroscopy](#)
- [supports technique^{op} p e e m](#)

The analysis of chemical and electronic states in complex and nanostructured material systems requires electron spectroscopy to be carried out with nanometer lateral resolution, i.e. spectronanoscropy. This goal is achieved in NanoESCA instrument by combining a parallel imaging photoelectron emission microscope with an appropriate energy filter. This instrument has a particular emphasis on the spectroscopic aspects and enables laterally resolved photoelectron spectroscopy from the VUV up into the hard x-ray regime.

nanofocus x ray scatteringⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#NanofocusX-RayScattering>

belongs to

- [scattering^c](#)

NanospectroscopyBeamlineⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#NanospectroscopyBeamline>

belongs to

- [spectroscopic photoemission and photoemission electron microscope^c](#)

is same as

- [s p e l e e m](#)

has facts

- [supports technique^{op} electron microscopy](#)

The Nanospectroscopy beamline at Elettra operates a state-of-the-art spectroscopic photoemission and photoemission electron microscope (SPELEEM). This powerful instrument offers a wide range of complementary methods including low energy electron microscopy (LEEM) providing structural, chemical and magnetic sensitivity. The lateral resolution of the microscope currently approaches few tens nm.

NCDⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NCD>**has facts**

- [supports technique^{op}](#) [non crystalline diffraction](#)
- [supports technique^{op}](#) [s a x s](#)
- [supports technique^{op}](#) [w a x s](#)

Small Angle X-ray Scattering (SAXS) experiments provides structural and dynamics information of large molecular assemblies like polymers, colloids, proteins and fibres. A wide range of fields (medicine, biology, chemistry, physics, archaeological, environmental and conservation sciences and materials) is covered by this technique

near edge x ray absorption fine structure spectroscopyⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NearEdgeX-rayAbsorptionFineStructureSpectroscopy>**belongs to**

- [technique^c](#)

is same as

- [n e x a f s](#)

neutron autoradiographyⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NeutronAutoradiography>**belongs to**

- [technique^c](#)

neutron depolarisationⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NeutronDepolarisation>**belongs to**

- [technique^c](#)

neutron diffractionⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NeutronDiffraction>**belongs to**

- [technique^c](#)

is also defined as

- [class](#)

[neutron interferometryⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NeutronInterferometry>**belongs to**[technique^c](#)[neutron reflectometryⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NeutronReflectometry>**belongs to**[technique^c](#)**is also defined as**[class](#)[neutron scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NeutronScattering>**belongs to**[technique^c](#)[neutron spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NeutronSpectroscopy>**belongs to**[technique^c](#)**is also defined as**[class](#)[neutron transmission radiographyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NeutronTransmissionRadiography>**belongs to**[technique^c](#)[nexusⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Nexus>**belongs to**[file format^c](#)

[non crystalline diffractionⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NonCrystallineDiffraction>**belongs to**[technique^c](#)[non resonantinelastic x ray scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Non-resonantinelasticX-rayScattering>**belongs to**[technique^c](#)**is same as**[n i x s](#)[nuclear resonanceⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NuclearResonance>**belongs to**[technique^c](#)[nuclear resonant scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#NuclearResonantScattering>**belongs to**[technique^c](#)**is same as**[n r s](#)[o d eⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ODE>**has facts**[in facility^{op} s o l e i l](#)

The principle of this line, which makes it possible to focus on the sample - without having to move - the entire energy range required for the instantaneous recording of the absorption spectrum, is particularly adapted for rapid kinetics experiments (in the area of a millisecond), as well as for absorption measurements under extreme conditions of pressure and temperature. The main set of themes involves geosciences, chemical reactivity and the transitions of phases with particular emphasis on high-pressure magnetism.

offspecⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#OFFSPEC>

belongs to

[reflectometer^c](#)

has facts

[in facility^{op} is is](#)

[has operation status^{op} operational](#)

[supports technique^{op} reflectometry](#)

Offspec is an advanced reflectometer giving access to nanometre length scales parallel and perpendicular to interfaces. It uses the technique of neutron spin-echo to encode the path that neutrons take through the instrument.

osirisⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#OSIRIS>

belongs to

[neutron spectrometer^c](#)

has facts

[in facility^{op} is is](#)

[supports technique^{op} neutron diffraction](#)

[has operation status^{op} operational](#)

OSIRIS is a spectrometer optimised for very low energy studies and long wavelength diffraction. These studies can provide information on relatively slow motions in materials such as diffusion in liquids and the movement of protons in batteries.

OSIRIS can be used as either a high-resolution, long-wavelength diffractometer or for high-resolution quasi/ inelastic neutron scattering spectroscopy. For the purpose of description, OSIRIS may be considered as consisting of two coupled spectrometer components.

operationalⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#Operational>

belongs to

[operational^c](#)

is disjoint with

[decommissioned, under construction, under proposal](#)

is also defined as

[class](#)

optical spectroscopyⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#OpticalSpectroscopy>

belongs to

[spectroscopy^c](#)

[opticsⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#Optics>

has facts

[in facility^{op} s l s](#)

[optics beamlineⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#OpticsBeamline>

has facts

[supports technique^{op} soft x ray diffraction](#)

[orient expressⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#OrientExpress>

belongs to

[single crystal diffractometer^c](#)

has facts

[in facility^{op} i l l](#)

[supports technique^{op} laue diffraction](#)

[supports technique^{op} single crystal diffraction](#)

OrientExpress is an automatic Laue neutron-diffractometer based upon two high-performance image-intensified CCD cameras coupled to a large-area neutron scintillator. It allows electronic capture of neutron Laue diffraction patterns in a very short time (few seconds). A gain of about 100 in efficiency is obtained compared to the conventional film method with comparable spatial resolution.

[p c iⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PCI>

is same as

[phase contrast imaging](#)

[p dⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PD>

belongs to

[diffraction^c](#)

is same as

[powder diffraction](#)

p d fⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PDF>

is same as

[pair distribution function](#)

p e a r lⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PEARL>

belongs to

[neutron diffractometer^c](#)

has facts

[supports technique^{op} angle resolved photoemission spectroscopy](#)

[has pressure level^{op} high pressure](#)

[in facility^{op} i s i s](#)

[has operation status^{op} operational](#)

[supports technique^{op} powder diffraction](#)

[in facility^{op} s l s](#)

[supports technique^{op} scanning tunnelling microscopy](#)

[supports technique^{op} x ray photoelectron diffraction](#)

Pearl has been specifically designed for in situ studies of materials at high pressure. The application of high pressure can induce dramatic changes in the physical properties of materials. For example, upon applying a relatively modest pressure water transforms to a crystal structure that does not melt until 100°C.

p e e mⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PEEM>

belongs to

[technique^c](#)

is same as

[photoemission electron microscopy](#)

p e t r a i i iⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PETRAIII>

belongs to

[synchrotron^c](#)**has facts**

- [has instrument^{op} P08](#)
- [has instrument^{op} HighResolutionDynamicsBeamline](#)
- [has instrument^{op} minax](#)
- [has instrument^{op} HardX-RayDiffractionBeamline](#)
- [has instrument^{op} p04](#)
- [has instrument^{op} P05](#)
- [has instrument^{op} P06](#)
- [has instrument^{op} P07](#)
- [has instrument^{op} CoherenceApplicationsBeamline](#)
- [has instrument^{op} P11](#)
- [has instrument^{op} p12emb1biosaxsbeamline](#)
- [has instrument^{op} P13](#)
- [has instrument^{op} P14](#)
- [has instrument^{op} ResonantScatteringandDiffractionBeamline](#)

PETRA III, which took up operation in 2009, is the most brilliant storage-ring-based X-ray radiation source in the world. As the most powerful light source of its kind, it offers scientists outstanding experimental opportunities with X-rays of an exceptionally high brilliance. In particular, this benefits researchers investigating very small samples or those requiring tightly collimated and very short-wavelength X-rays for their experiments.

[p f1 bⁿⁱ](#)

[back to [ToC](#) or [Named Individual Toc](#)]

IRI: <http://www.purl.org/pankos#PF1B>

belongs to

- [nuclear particle physics^c](#)

has facts

- [in facility^{op} i11](#)

PF1B is the facility dedicated to the particle and nuclear physics experiments with polarized and un-polarized cold neutrons. The neutron beam position is at the neutron guide H113.

[p f2ⁿⁱ](#)

[back to [ToC](#) or [Named Individual Toc](#)]

IRI: <http://www.purl.org/pankos#PF2>

Ultracold neutron facility

belongs to

- [nuclear particle physics^c](#)

has facts

- [in facility^{op} i11](#)

Ultracold neutrons (UCN) with wavelengths around 1000 Å have several unique features: one

of them is that they are totally reflected from the surface of most materials under any angle of incidence. This offers the possibility of storing neutrons in so called neutron bottles (or traps) for the observation of several fundamental characteristics of the neutron itself.

p g beamlineⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#PGBeamline>

is same as

[the plane grating monochromator beamline](#)

has facts

[supports technique^{op} holography](#)

[supports technique^{op} magnetic spectroscopy](#)

[supports technique^{op} photo electron spectroscopy](#)

p h o e n i xⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#PHOENIX>

has facts

[supports technique^{op} micro xrf](#)

[in facility^{op} s l s](#)

[supports technique^{op} x a s](#)

p l e i a d e sⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#PLEIADES>

has facts

[supports technique^{op} mass spectrometry](#)

[in facility^{op} soleil](#)

[supports technique^{op} x a s](#)

[supports technique^{op} x p s](#)

PLEIADES is an ultra high resolution soft X-ray beamline (ultimate resolving power of about 100000 at 50 eV) covering the energy domain ranging from 10 eV to 1 keV. PLEIADES is dedicated to spectroscopy based atomic and molecular physics studies of diluted samples (atoms, molecules, ions, clusters, molecules adsorbed on surfaces).

p m3ⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#PM3>

has facts

[in facility^{op} b e s s y i i](#)

[supports technique^{op} x ray magnetic circular dichroism](#)

p n1ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#PN1>

PN1 (Lohengrin) an exotic isotope spectrometer

belongs to[nuclear particle physics^c](#)[spectrometer^c](#)**has facts**[in facility^{op} i_11](#)

LOHENGREN is a recoil mass spectrometer for studying the properties of the exotic isotopes produced during the fission process. It allows us to study mass, kinetic energy and charge distribution for products from thermal neutron induced nuclear fission at very high resolution.

p n3ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#PN3>

Gamma-Ray Spectrometers GAMS4 and GAMS5

belongs to[gamma ray spectrometer^c](#)[nuclear particle physics^c](#)**has facts**[in facility^{op} i_11](#)[supports technique^{op} single crystal diffraction](#)[supports technique^{op} spectroscopy](#)

The high resolution gamma ray facility GAMS makes use of the fact that, at the ILL reactor, one can obtain extremely high specific activities when exploiting thermal neutron capture at an in-pile target facility. This allows us to aim for the application of gamma spectroscopy with the highest possible energy resolution. Many studies on this facility have aimed to contribute to our understanding of the structure of nuclei. Others are devoted to the determination of standards and fundamental constants or to deduce information about short lifetimes of excited nuclear states.

p o l a r i sⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#POLARIS>**belongs to**[neutron diffractometer^c](#)**has facts**[in facility^{op} i_s_i_s](#)[has operation status^{op} operational](#)[supports technique^{op} powder diffraction](#)

POLARIS is the ideal complement to high resolution powder diffractometer HRPD. Its strengths lie in the rapid characterisation of structures, the study of small amounts of materials, the collection of data sets in rapid time and the studies of materials under non-ambient conditions.

p o l d iⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#POLDI>

has facts

[supports technique^{op} time of flight diffraction](#)

p o l r e fⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#POLREF>

belongs to

[reflectometer^c](#)

has facts

[in facility^{op} i s i s](#)

[supports technique^{op} neutron depolarisation](#)

[has operation status^{op} operational](#)

[supports technique^{op} polarised neutron reflectometry](#)

[supports technique^{op} reflectometry](#)

Polref is a polarised neutron reflectometer designed for the study of the magnetic ordering in and between the layers and surfaces of thin film materials.

p r o x i m a1ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PROXIMA1>

has facts

[supports technique^{op} m a d](#)

[supports technique^{op} macromolecular crystallography](#)

[in facility^{op} s o l e i l](#)

PROXIMA 1, operational since March 2008, delivers an intense, parallel and tunable X-ray beam for measurements at high resolution or from large unit cell dimension crystals. The beamline has recently been upgraded with a very large surface area detector (PILATUS 6M). The 3 circle "kappa" geometry goniostat is in routine use for advanced data collection strategies.

p r o x i m a2ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PROXIMA2>

has facts

supports technique^{op} [macromolecular crystallography](#)
in facility^{op} [soleil](#)

PROXIMA 2 is the first canted beamline at the French National Synchrotron Source SOLEIL and it will provide two independent and energy tunable experimental stations dedicated to macromolecular crystallography, PX2-A & PX2-B. The first station, PX2-A, is now open to users. Its source is an in-vacuum U24 undulator, and the optical layout includes a cryogenically cooled channel-cut Si[111] monochromator, a convex horizontal pre-focussing mirror (HPM) and a pair of focusing bimorph mirrors in Kirkpatrick-Baez (KB) configuration.

[p s iⁿⁱ](#)back to [ToC](#) or [Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PSI>

belongs to

[facility](#)^c

has facts

has sub facility^{op} [hipa](#)
has sub facility^{op} [sing](#)
has sub facility^{op} [s1s](#)
has sub facility^{op} [sus](#)

[p s i c h eⁿⁱ](#)back to [ToC](#) or [Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PSICHE>

has facts

supports technique^{op} [angular dispersive x ray diffraction](#)
supports technique^{op} [dispersive x ray diffraction](#)
in facility^{op} [soleil](#)
supports technique^{op} [tomography](#)

SICHE is dedicated to x-ray diffraction under extreme conditions (pressure-temperature) and to tomography by absorption contrast at high energy (20-50 keV).

It is installed on a short straight section of the SOLEIL (I03c), The source is a under vacuum multi-pole wiggler (2.1 T) which delivers a white beam with a large photon energy range (15-100keV).

[p x iⁿⁱ](#)back to [ToC](#) or [Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PXi>

has facts

supports technique^{op} [macromolecular crystallography](#)
supports technique^{op} [multi wavelength anomalous dispersion](#)

[in facility^{op} s | s](#)[p x i iⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#PX-II>**has facts**

[supports technique^{op} macromolecular crystallography](#)
[in facility^{op} s | s](#)

[p x i iⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#PXIII>**has facts**

[supports technique^{op} in situ x ray diffraction](#)
[supports technique^{op} macromolecular crystallography](#)
[in facility^{op} s | s](#)

[p04ⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#P04>**belongs to**[Instrument^c](#)**is same as**[variable polarization x u v beamline](#)[P05ⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#P05>**belongs to**[Instrument^c](#)[P06ⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#P06>[p06 hard x ray micro/ nano probe beamlineⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** http://www.purl.org/pankos#P06Hard_X-rayMicro/NanoProbeBeamline**has facts**[supports technique^{op} absorption contrast imaging](#)

supports technique^{op} [phase contrast imaging](#)
supports technique^{op} [x ray diffraction](#)
supports technique^{op} [x a s](#)
supports technique^{op} [x r f](#)

P07ⁿⁱ

[back to [ToC](#) or Named Individual ToC]

IRI: <http://www.purl.org/pankos#P07>

is same as

[the high energy materials science beamline of h z g](#)

has facts

has resolution level^{op} [high resolution](#)
supports technique^{op} [micro tomography](#)
in facility^{op} [p e t r a i i i](#)
supports technique^{op} [strain analysis](#)

P08ⁿⁱ

[back to [ToC](#) or Named Individual ToC]

IRI: <http://www.purl.org/pankos#HighResolutionDiffractionBeamline>

has facts

has resolution level^{op} [high resolution](#)
supports technique^{op} [x ray scattering](#)

P11ⁿⁱ

[back to [ToC](#) or Named Individual ToC]

IRI: <http://www.purl.org/pankos#P11>

belongs to

[scanning transmission x ray microscope^c](#)

has facts

supports technique^{op} [scanning transmission x ray microscopy](#)

p12 e m b l bio s a x s beamlineⁿⁱ

[back to [ToC](#) or Named Individual ToC]

IRI: <http://www.purl.org/pankos#P12EMBLBioSAXSBeamline>

has facts

supports technique^{op} [a s a x s](#)
supports technique^{op} [s a x s](#)

P13ⁿⁱ

[back to [ToC](#) or Named Individual ToC]

IRI: <http://www.purl.org/pankos#P13>

has facts

[supports technique^{op}](#) [macromolecular crystallography](#)

P14ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#P14>

has facts

[supports technique^{op}](#) [macromolecular crystallography](#)

[pair distribution functionⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PairDistributionFunction>

belongs to

[technique^c](#)

is same as

[p d f](#)

[pair distribution function analysisⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PairDistributionFunctionAnalysis>

belongs to

[technique^c](#)

[phase contrast imagingⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PhaseContrastImaging>

belongs to

[imaging^c](#)

is same as

[p c i](#)

[photo electron spectroscopyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PhotoElectronSpectroscopy>

belongs to

[technique^c](#)

[photoelectron diffractionⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PhotoelectronDiffraction>

belongs to

[x ray diffraction^c](#)

[photoemission electron microscopyⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#PhotoemissionElectronMicroscopy>

belongs to

[imaging^c](#)

is same as

[p e e m](#)

[photoemission spectroscopyⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#PhotoemissionSpectroscopy>

belongs to

[technique^c](#)

[photon correlation x ray spectroscopyⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#PhotonCorrelationX-RaySpectroscopy>

belongs to

[x ray spectroscopy^c](#)

is same as

[x ray photon correlation spectroscopy](#)

[pink beam imagingⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#PinkBeamImaging>

belongs to

[technique^c](#)

[pol lux^{hi}](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#PolLux>

has facts

[in facility^{op} s | s](#)

[supports technique^{op} scanning transmission x ray microscopy](#)

[polarisation analysisⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#PolarisationAnalysis>

belongs to

[technique^c](#)

[polarised neutron reflectivityⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PolarisedNeutronReflectivity>

belongs to

[neutron reflectometry^c](#)

[polarised neutron reflectometryⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PolarisedNeutronReflectometry>

belongs to

[reflectometry^c](#)

[powder diffractionⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#PowderDiffraction>

belongs to

[neutron diffraction^c](#)

[x ray diffraction^c](#)

is same as

[p d](#)

[quasi elastic neutron spin echo scatteringⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#QuasiElasticNeutronSpinEchoScattering>

belongs to

[spin echo s a n s^c](#)

[quasielastic scatteringⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#QuasielasticScattering>

belongs to

[technique^c](#)

[r e s p e sⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#RESPES>

belongs to

[technique^c](#)

is same as

[resonant photoemission](#)

r f m s rⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#RF-mSR>

belongs to

[technique^c](#)

is same as

[radio frequency muon spin resonance](#)

r g b l dipoleⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#RGBLDipole>

belongs to

[Instrument^c](#)

r i x sⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#RIXS>

belongs to

[technique^c](#)

is same as

[resonant inelastic soft x ray scattering](#)

r o c kⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#ROCK>

belongs to

[Instrument^c](#)

The ROCK beamline (ROCK being the acronym for Rocking Optics for Chemical Kinetics) is devoted to the study of fast kinetic processes in nanomaterials used in catalysis and batteries. The objective is to contribute to the development of more efficient catalysts and batteries which should find successful industrial applications in the field of energy generation and storage in compliance with the protection of public health and environment.

r o t a xⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#ROTAX>

belongs to

[neutron diffractometer^c](#)**has facts**[in facility^{op} i s i s](#)[supports technique^{op} neutron diffraction](#)[has operation status^{op} operational](#)[radio frequency muon spin resonanceⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** http://www.purl.org/pankos#RadioFrequencyMuonSpin_Resonance**belongs to**[technique^c](#)**is same as**[rfmsr](#)[radiographyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Radiography>**belongs to**[technique^c](#)[raman spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#RamanSpectroscopy>**belongs to**[technique^c](#)[rawⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Raw>**belongs to**[file format^c](#)[reflectometerⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Reflectometer>**belongs to**[Instrument^c](#)**is also defined as**[class](#)[reflectometryⁿⁱ](#)[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#Reflectometry>

belongs to

[technique^c](#)

is also defined as

[class](#)

[resonant absorptionⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ResonantAbsorption>

belongs to

[technique^c](#)

[resonant diffractionⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ResonantDiffraction>

belongs to

[x ray diffraction^c](#)

[resonant inelastic soft x ray scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ResonantInelasticSoftX-RayScattering>

belongs to

[technique^c](#)

is same as

[rixs](#)

[resonant photoemissionⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ResonantPhotoemission>

belongs to

[technique^c](#)

is same as

[respes](#)

[resonant scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ResonantScattering>

belongs to

[scattering^c](#)

has facts

[supports technique^{op}](#) [hard x ray photoelectron spectroscopy](#)

[resonant spectroscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ResonantSpectroscopy>

belongs to

[technique^c](#)

[resonant x ray scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ResonantX-RayScattering>

belongs to

[scattering^c](#)

[ResonantScatteringandDiffractionBeamlineⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ResonantScatteringandDiffractionBeamline>

has facts

[supports technique^{op}](#) [resonant diffraction](#)

[supports technique^{op}](#) [resonant scattering](#)

[supports technique^{op}](#) [resonant x ray scattering](#)

[rita i iⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#Rita-II>

has facts

[in facility^{op}](#) [sing](#)

[supports technique^{op}](#) [three axis spectroscopy](#)

[salsaⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#SALSA>

Strain imager for engineering applications SALSA

belongs to

[power diffractometer^c](#)

has facts

[in facility^{op}](#) [ill](#)

[supports technique^{op}](#) [powder diffraction](#)

SALSA is the ILL strain imager dedicated to the determination of residual stresses in a broad range of applications in terms of components and materials. It is designed for diffraction

measurements in "real" engineering components and optimised for stress determination in metallic components.

s a m b aⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#SAMBA>

has facts

- [supports technique^{op} differential scanning calorimetry](#)
- [supports technique^{op} raman spectroscopy](#)
- [in facility^{op} soleil](#)
- [supports technique^{op} uv visible spectroscopy](#)

SAMBA is one of the two hard X-ray absorption spectroscopy (XAS) beamlines at SOLEIL together with Diffabs. SAMBA aiming to be dedicated to large and varied scientific communities from physics to chemistry and biology. The design of SAMBA optics is optimised in order to be very versatile, to cover permanently the 4-42 keV energy range with a high flux of photon and a good energy resolution.

s a n d a l sⁿⁱ

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IRI: <http://www.purl.org/pankos#SANDALS>

belongs to

- [neutron diffractometer^c](#)
- [sans instrument^c](#)

has facts

- [in facility^{op} iss](#)
- [supports technique^{op} neutron diffraction](#)
- [has operation status^{op} operational](#)

SANDALS is a diffractometer especially built for investigating the structure of liquids and amorphous materials.

Using SANDALS it is possible to measure the static structure factor, S(Q), of a disordered material over a wide range (0.2-50 Å-1) of momentum transfers.

Its experiments usually employ the powerful technique of isotopic substitution technique to perform in depth structural studies on the atomic scale.

s a n iⁿⁱ

[back to ToC or Named Individual Toc](#)

IRI: <http://www.purl.org/pankos#SAN-I>

has facts

- [supports technique^{op} small angle neutron scattering](#)

s a n s iⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SANS-I>**belongs to**[Instrument^c](#)**s a n s i i**ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SANS-II>**has facts**[supports technique^{op} small angle neutron scattering](#)**s a n s instrument**ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SANSInstrument>**belongs to**[Instrument^c](#)**is also defined as**[class](#)**s a n s 2 d**ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SANS2D>**belongs to**[s a n s instrument^c](#)**has facts**[in facility^{op} i s i s](#)[has operation status^{op} operational](#)[supports technique^{op} small angle neutron scattering](#)

Sans2d can be used to examine size, shape, internal structure and spatial arrangement in nanomaterials, ‘soft matter’, and colloidal systems, including those of biological origin, on length scales of between* 0.25-300 nm. SANS does not locate individual atoms but rather looks at the larger structures they form. This gives important insights into many everyday materials and biological systems.

s a r p e sⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SARPES>**belongs to**[technique^c](#)

is same as[spin and angle resolved photoelectron spectroscopy](#)[s a x sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SAXS>**belongs to**[small angle x ray scattering^c](#)**is same as**[small angle x ray scattering](#)[s a x s beamlineⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SAXSBeamline>**has facts**[supports technique^{op} \[s a x s\]\(#\)](#)[supports technique^{op} \[spectronanoscopy\]\(#\)](#)

The highflux SAXS beamline at Elettra has been built by the Institute of Biophysics and Nanosystems Research (IBN), Austrian Academy of Sciences, and is in user operation since September 1996. On 1st October 2012 the beamline was transferred from the IBN to the Institute of Inorganic Chemistry of Graz University of Technology.

The beamline was mainly intended for time-resolved studies on fast structural transitions in the sub-millisecond time region in solutions and partly ordered systems with a SAXS-resolution of at least 100 nm in real-space.

[s dⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SD>**belongs to**[technique^c](#)**is same as**[in situ surface diffraction](#)[s e x t a n t sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SEXTANTS>**has facts**[supports technique^{op} \[c i x\]\(#\)](#)[supports technique^{op} \[fourier transform holography\]\(#\)](#)[supports technique^{op} \[i x s\]\(#\)](#)[supports technique^{op} \[r i x s\]\(#\)](#)[in facility^{op} \[s o l e i l\]\(#\)](#)

SEXTANTS beamline is dedicated to the study of magnetic and electronics properties of solids by polarized soft x-ray elastic and inelastic scattering. The beamline cover the energy range from 50 - 1800 eV (optimized from 70 to 1200eV)

s i mⁿⁱ

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IRI: <http://www.purl.org/pankos#SIM>

has facts

[supports technique^{op}](#) [photoemission electron microscopy](#)
[in facility^{op}](#) [s l s](#)

s i n qⁿⁱ

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IRI: <http://www.purl.org/pankos#SINQ>

belongs to

[neutron source^c](#)

has facts

[has instrument^{op}](#) [a m o r](#)
[has instrument^{op}](#) [b o a](#)
[has instrument^{op}](#) [d m c](#)
[has instrument^{op}](#) [e c h o](#)
[has instrument^{op}](#) [e i g e r](#)
[has instrument^{op}](#) [f o c u s](#)
[has instrument^{op}](#) [h r p t](#)
[has instrument^{op}](#) [i c o n](#)
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[has instrument^{op}](#) [m o r p h e u s](#)
[has instrument^{op}](#) [m u p a d](#)
[has instrument^{op}](#) [n a a](#)
[has instrument^{op}](#) [n a r z i s s](#)
[has instrument^{op}](#) [n e u t r a](#)
[has instrument^{op}](#) [o r i o n](#)
[has instrument^{op}](#) [p n a](#)
[has instrument^{op}](#) [p o l d i](#)
[has instrument^{op}](#) [r i t a i i](#)
[has instrument^{op}](#) [s a n s i](#)
[has instrument^{op}](#) [s a n s i i](#)
[has instrument^{op}](#) [t a s p](#)
[has instrument^{op}](#) [t r i c s](#)
[has instrument^{op}](#) [m a r s](#)

s i r i u sⁿⁱ

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IRI: <http://www.purl.org/pankos#SIRIUS>

has facts

- [supports technique^{op} g i s a x s](#)
- [supports technique^{op} g i x d](#)
- [in facility^{op} s o l e i l](#)

SIRIUS takes advantage of the best energy range of the SOLEIL synchrotron ring between 1.4 and 11 keV in order to provide a tool for structural study to two large communities of condensed matter soft interfaces and semiconductor or magnetic nanostructures

s i sⁿⁱ

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IRI: <http://www.purl.org/pankos#SIS>

has facts

- [supports technique^{op} angle resolved photoemission spectroscopy](#)
- [in facility^{op} s l s](#)
- [supports technique^{op} spin and angle resolved photoelectron spectroscopy](#)

s i s s i n i

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IRI: <http://www.purl.org/pankos#SISSI>

has facts

- [supports technique^{op} i r spectroscopy](#)

The SISSI infrared beamline at Elettra extracts the IR and visible components of synchrotron emission for performing spectroscopy, microspectroscopy and imaging. The applications cover a wide range of research fields, including surface and material science, biochemistry, forensics, microanalysis, geology, cell biology, biomedical diagnostics, microfluidics, high-pressure, time resolved IR, conservation science, protein folding, chemical kinetics etc.

s i x sⁿⁱ

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IRI: <http://www.purl.org/pankos#SixS>

has facts

- [supports technique^{op} anomalous surface x ray scattering](#)
- [supports technique^{op} coherent diffraction imaging](#)
- [supports technique^{op} crystal truncation rods](#)
- [supports technique^{op} g i s a x s](#)
- [supports technique^{op} g i x d](#)
- [in facility^{op} s o l e i l](#)
- [supports technique^{op} x rr](#)

SixS is a wide-energy range (5 -20 keV) beamline dedicated to structural characterization of

surfaces, interfaces (solid-solid or solid-liquid), as well as nano-objects in controlled environments by means of surface-sensitive x-ray scattering techniques.

s | sⁿⁱ

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IRI: <http://www.purl.org/pankos#SLS>

belongs to

[photon source^c](#)

[synchrotron^c](#)

has facts

[has instrument^{op} address](#)

[has instrument^{op} femto](#)

[has instrument^{op} ir](#)

[has instrument^{op} ms](#)

[has instrument^{op} microxas](#)

[has instrument^{op} nanoxas](#)

[has instrument^{op} optics](#)

[has instrument^{op} pearl](#)

[has instrument^{op} phoenix](#)

[has instrument^{op} pxi](#)

[has instrument^{op} pxii](#)

[has instrument^{op} polux](#)

[has instrument^{op} sim](#)

[has instrument^{op} sis](#)

[has instrument^{op} superxas](#)

[has instrument^{op} tomcat](#)

[has instrument^{op} vuv](#)

[has instrument^{op} xtreme](#)

[has instrument^{op} xilli](#)

[has instrument^{op} cساكس](#)

s | sⁿⁱ

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IRI: <http://www.purl.org/pankos#SMIS>

has facts

[supports technique^{op} microscopy](#)

[in facility^{op} soleil](#)

SMIS is one of the two infrared beamlines at SOLEIL together with AILES. SMIS is aiming to deliver an infrared beam of high brilliance in the 1-100 microns spectral range, with a spectral region optimised for investigation between 2.5-100 microns. This synchrotron source will be coupled to an infrared microscope. The beamline is dedicated to microscopic analysis of a variety of samples, spanning from polymer films and multilayers, mineral inclusions, biological and biomedical studies, to Archaeology.

s o l e i lⁿⁱ

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IRI: <http://www.purl.org/pankos#SOLEIL>

belongs to

[synchrotron](#)^c

has facts

[has instrument^{op} a i l e s](#)
[has instrument^{op} a n t a r e s](#)
[has instrument^{op} c a s s i o p e e](#)
[has instrument^{op} c r i s t a l](#)
[has instrument^{op} d e i m o s](#)
[has instrument^{op} d e s i r s](#)
[has instrument^{op} d i f f a b s](#)
[has instrument^{op} d i s c o](#)
[has instrument^{op} g a l a x i e s](#)
[has instrument^{op} h e r m e s](#)
[has instrument^{op} l u c i a](#)
[has instrument^{op} m a r s](#)
[has instrument^{op} m e t r o l o g i e](#)
[has instrument^{op} n a n o s c o p i u m](#)
[has instrument^{op} o d e](#)
[has instrument^{op} p l e i a d e s](#)
[has instrument^{op} p r o x i m a1](#)
[has instrument^{op} p r o x i m a2](#)
[has instrument^{op} p s i c h e](#)
[has instrument^{op} r o c k](#)
[has instrument^{op} s a m b a](#)
[has instrument^{op} s e x t a n t s](#)
[has instrument^{op} s i r i u s](#)
[has instrument^{op} s i x s](#)
[has instrument^{op} s m i s](#)
[has instrument^{op} s w i n g](#)
[has instrument^{op} t e m p o](#)

SOLEIL synchrotron, inaugurated on December 18, 2006, brings together the whole of the French and international scientific community. It required five years to bring this very high-tech equipment, installed on the Saclay plateau at the heart of a very high-level scientific environment, up to date. Now, it's open to users, researchers in various disciplines used the highest-performing techniques to gain access to the geometry of the material, as well as its chemical, magnetic, and electric properties.

s p e l e e mⁿⁱ

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IRI: <http://www.purl.org/pankos#SPELEEM>

is same as[NanospectroscopyBeamline](#)**has facts**[supports technique^{op} electron microscopy](#)**s p mⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SPM>**belongs to**[technique^c](#)**is same as**[scanning probe microscopy](#)**s t mⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#STM>**belongs to**[technique^c](#)**is same as**[scanning tunnelling microscopy](#)**s t x mⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#STXM>**belongs to**[technique^c](#)**is same as**[scanning transmission x ray microscopy](#)**s u r fⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SURF>**belongs to**[reflectometer^c](#)**has facts**[in facility^{op} i s i s](#)[has operation status^{op} operational](#)[supports technique^{op} reflectometry](#)

SURF is one of the leading instruments in the world for liquid interface research.

SURF is the newer of the two Neutron Reflectometers (NR) at ISIS. Compared to its sister instrument CRISP, SURF is optimised for higher flux. With horizontal sample geometry it is

therefore ideally suited for the study of liquid surfaces.

s w i n gⁿⁱ

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IRI: <http://www.purl.org/pankos#SWING>

has facts

- [supports technique^{op} g i s a x s](#)
- [supports technique^{op} s a x s](#)
- [in facility^{op} s o l e i l](#)
- [supports technique^{op} w a x s](#)

By providing information on the structure of matter at scales varying between nanometer and micrometer, the beamline SWING will help answering the numerous questions related to soft condensed matter, conformation of macro-molecules in solution and composite materials in material sciences. This experimental set up will allow small-angle X-ray scattering (SAXS) and wide-angle X-ray scattering measurements (WAXS) to be performed simultaneously in the 5-17 keV energy range, as well as grazing incidence small angle scattering (GISAXS). Anomalous scattering experiments will be facilitated

s x dⁿⁱ

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IRI: <http://www.purl.org/pankos#SXD>

belongs to

- [neutron diffractometer^c](#)
- [single crystal diffractometer^c](#)

has facts

- [in facility^{op} i s i s](#)
- [supports technique^{op} neutron diffraction](#)
- [has operation status^{op} operational](#)
- [supports technique^{op} single crystal diffraction](#)

SXD, the Single Crystal Diffractometer, uses the time-of-flight Laue technique to access large 3-D volumes of reciprocal space in a single measurement.

This makes SXD especially powerful in applications involving surveys of reciprocal space, such as phase transitions and incommensurate structures, and also in applications where sample orientation may be restricted.

s x r dⁿⁱ

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IRI: <http://www.purl.org/pankos#SXRD>

belongs to

- [technique^c](#)

is same as

- [surface x ray diffraction](#)

s y r m e pⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SYRMEP>**has facts**[supports technique^{op} phase contrast imaging](#)

The SYRMEP beamline has been designed by Sincrotrone Trieste, in cooperation with the University of Trieste and the INFN, for research in medical diagnostic radiology. The use of monochromatic and laminar-shaped beams allows, in principle, an improvement of the clinical quality of images and a reduction of adsorbed dose (because of both monochromaticity and scatter reduction).

s18ⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#S18>

Neutron interferometer

belongs to[neutron interferometer^c](#)**has facts**[in facility^{op} i_11](#)[supports technique^{op} neutron interferometry](#)[supports technique^{op} usans](#)

The CRG B instrument S18 is a perfect crystal thermal neutron interferometer which can also be configured as a high resolution Bonse Hart camera. This instrument can be used for precise measurement of neutron scattering lengths and for basic neutron quantum optics studies and related phenomena.

scanned energyand angular photoelectron diffractionⁿⁱ[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ScannedEnergyandAngularPhotoelectronDiffraction>**belongs to**[technique^c](#)**scanned probe imagingⁿⁱ**[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#ScannedProbeImaging>**belongs to**[imaging^c](#)**scanning angle resolved photoemission spectromicroscopyⁿⁱ**

IRI:

<http://www.purl.org/pankos#ScanningAngleResolvedPhotoemissionSpectromicroscopy>

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belongs to

[microscopy^c](#)

[technique^c](#)

[scanning photoelectron microscopeⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ScanningPhotoelectronMicroscope>

belongs to

[microscope^c](#)

[scanning photoelectron microscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ScanningPhotoelectronMicroscopy>

belongs to

[microscopy^c](#)

[scanning probe microscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ScanningProbeMicroscopy>

belongs to

[technique^c](#)

is same as

[s p m](#)

[scanning transmission x ray microscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ScanningTransmissionX-RayMicroscopy>

belongs to

[microscopy^c](#)

[technique^c](#)

is same as

[s t x m](#)

[scanning tunnelling microscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ScanningTunnellingMicroscopy>

belongs to

[technique^c](#)

is same as
[s t m](#)

[scanning x ray fluorescenceⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ScanningX-RayFluorescence>

belongs to

[technique^c](#)
[x ray imaging^c](#)

[scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#Scattering>

belongs to

[technique^c](#)

is also defined as

[class](#)

[single crystal diffractionⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#SingleCrystalDiffraction>

belongs to

[neutron diffraction^c](#)
[x ray diffraction^c](#)

is same as

[single crystal neutron diffraction](#)

[single crystal diffractometerⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#SingleCrystalDiffractometer>

belongs to

[Instrument^c](#)

is also defined as

[class](#)

[single crystal neutron diffractionⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#SingleCrystalNeutronDiffraction>

belongs to

[technique^c](#)

is same as

[single crystal diffraction](#)

[small angle diffractionⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SmallAngleDiffraction>**belongs to**[x ray diffraction^c](#)[small angle inelastic scatteringⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SmallAngleInelasticScattering>**belongs to**[scattering^c](#)[small angle neutron scatteringⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SmallAngleNeutronScattering>**belongs to**[technique^c](#)**is also defined as**[class](#)[small angle x ray scatteringⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SmallAngleX-RayScattering>**belongs to**[small angle x ray scattering^c](#)[technique^c](#)**is same as**[s a x s](#)**is also defined as**[class](#)[small molecule diffractionⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SmallMoleculeDiffraction>**belongs to**[technique^c](#)[soft diffractionⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#SoftDiffraction>

belongs to

[x ray diffraction^c](#)

[soft x ray diffractionⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#SoftX-RayDiffraction>

belongs to

[technique^c](#)

[soft x ray imagingⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#SoftX-RayImaging>

belongs to

[x ray imaging^c](#)

[soft x ray resonant scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#SoftX-RayResonantScattering>

belongs to

[technique^c](#)

[soft x ray s a xⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#SoftX-RaySAX>

belongs to

[small angle x ray scattering^c](#)

[spectro microscopy beamlineⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#SpectroMicroscopyBeamline>

belongs to

[spectrometer^c](#)

has facts

[supports technique^{op}](#) [spectromicroscopy](#)

[spectromicroscopyⁿⁱ](#)

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#Spectromicroscopy>

belongs to

[technique^c](#)

spectronanoscopyⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#Spectronanoscopy>

belongs to

[technique^c](#)

spectroscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#Spectroscopy>

belongs to

[technique^c](#)

is also defined as

[class](#)

spin and angle resolved photoelectron spectroscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#SpinAndAngleResolvedPhotoelectronSpectroscopy>

belongs to

[technique^c](#)

is same as

[s a r p e s](#)

spin echo resolved grazing incidence scatteringⁿⁱ

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IRI: <http://www.purl.org/pankos#SpinEchoResolvedGrazingIncidenceScattering>

belongs to

[spin echo s a n s^c](#)

spin echo s a n sⁿⁱ

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IRI: <http://www.purl.org/pankos#SpinEchoSANS>

belongs to

[technique^c](#)

is also defined as

[class](#)

spin echo small angle neutron scatteringⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#SpinEchoSmallAngleNeutronScattering>

belongs to[spin echo s a n s^c](#)[spin echo spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SpinEchoSpectroscopy>**belongs to**[technique^c](#)[spin resolved photoemissionⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SpinResolvedPhotoemission>**belongs to**[technique^c](#)[stereotaxic synchrotron radiation therapyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#StereotaxicSynchrotronRadiationTherapy>**belongs to**[technique^c](#)[strain analysisⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#StrainAnalysis>**belongs to**[technique^c](#)[su sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SuS>**belongs to**[muon source^c](#)**has facts**[has instrument^{op} d o l l y](#)[has instrument^{op} g_p_d](#)[has instrument^{op} g_p_s](#)[has instrument^{op} h_a_l 9500](#)[has instrument^{op} l_e_m](#)[has instrument^{op} l_t_f](#)

[super a d a mⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SuperADAM>

The reflectometer SuperADAM is an angle dispersive fixed wavelength machine which combines high flux due to a focussing monochromator with a high Q resolution.

belongs to[reflectometer^c](#)**has facts**[in facility^{op} i_ll](#)[supports technique^{op} u_s_a_n_s](#)

SuperADAM is a redesigned version of ADAM. This CRG reflectometer for the analysis of materials is an angle dispersive fixed wavelength machine with horizontal scattering geometry. The new instrument has two operation modes. A high flux option (focussing monochromator made of intercalated graphite), mainly dedicated for soft matter research, and a lower flux option but with an improved Q resolution.

[super e s c aⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SuperESCA>**has facts**[in facility^{op} elettra](#)[supports technique^{op} high resolution core level photoemission spectroscopy](#)

SuperESCA (the first beamline operating at Elettra since 1994) brings the possibilities of this technique even further: by combining high resolution capabilities with the high flux of linearly polarised photons in the 90 to 1500 eV range, in the beamline end-station it is possible to obtain high resolution spectra also for low-density systems (such as thin films or supported nanoparticles) and follow in real-time their evolution, e.g. during functionalization processes or surface reactions.

[super x a sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SuperXAS>**has facts**[in facility^{op} s_l_s](#)[supports technique^{op} x_a_s](#)[supports technique^{op} x_e_s](#)[surface diffractionⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#SurfaceDiffraction>**belongs to**

[x ray diffraction^c](#)surface x ray diffractionⁿⁱ[back to ToC or Named Individual ToC](#)IRI: <http://www.purl.org/pankos#SurfaceX-RayDiffraction>**belongs to**[technique^c](#)**is same as**[sxrd](#)t a s pⁿⁱ[back to ToC or Named Individual ToC](#)IRI: <http://www.purl.org/pankos#TASP>**has facts**[supports technique^{op} triple axis spectroscopy](#)t e m p oⁿⁱ[back to ToC or Named Individual ToC](#)IRI: <http://www.purl.org/pankos#TEMPO>**has facts**[supports technique^{op} photo electron spectroscopy](#)[in facility^{op} soleil](#)

TEMPO is a soft X-ray beamline optimized for dynamic studies of electronic and

magnetic properties of materials using photoelectron spectroscopy.

t g m 7ⁿⁱ[back to ToC or Named Individual ToC](#)IRI: <http://www.purl.org/pankos#TGM-7>**has facts**[supports technique^{op} x ray magnetic circular dichroism](#)t hz beamlineⁿⁱ[back to ToC or Named Individual ToC](#)IRI: <http://www.purl.org/pankos#THz-Beamline>**has facts**[supports technique^{op} ir microscopy](#)[supports technique^{op} ir spectroscopy](#)t o m c a tⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#TOMCAT>

has facts

[in facility^{op}](#) [s | s](#)

[supports technique^{op}](#) [tomography](#)

[t o s c aⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#TOSCA>

belongs to

[neutron spectrometer^c](#)

has facts

[in facility^{op}](#) [i s i s](#)

[supports technique^{op}](#) [neutron spectroscopy](#)

[has operation status^{op}](#) [operational](#)

TOSCA is an indirect geometry spectrometer optimised for the study of molecular vibrations in the solid state.

TOSCA's simple operation and the similarity of the spectra to the optical analogues of infrared and Raman spectroscopy make it one of the most approachable instruments for first-time users. Science on Tosca includes studies of catalysts, hydrogen storage materials, hydrogen bonded systems, advanced materials, biological samples and organic compounds such as drugs.

[the high energy materials science beamline of h z gⁿⁱ](#)

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#TheHighEnergyMaterialsScienceBeamlineofHZG>

belongs to

[Instrument^c](#)

is same as

[P07](#)

[the plane grating monochromator beamlineⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ThePlaneGratingMonochromatorBeamline>

is same as

[p g beamline](#)

has facts

[supports technique^{op}](#) [holography](#)

[supports technique^{op}](#) [magnetic spectroscopy](#)

[supports technique^{op}](#) [photo electron spectroscopy](#)

[supports technique^{op}](#) [soft x ray diffraction](#)

[three axis spectrometerⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ThreeAxisSpectrometer>**belongs to**[Instrument^c](#)**is also defined as**[class](#)[three axis spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Three-AxisSpectroscopy>**belongs to**[neutron spectroscopy^c](#)**is same as**[triple axis spectroscopy](#)[thz beamlineⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ThzBeamline>**belongs to**[Instrument^c](#)[time of flight diffractionⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Time-of-FlightDiffraction>**belongs to**[technique^c](#)[time of flight s a n sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#TimeOfFlightSANS>**belongs to**[small angle neutron scattering^c](#)**is same as**[time of flight small angle neutron diffraction](#)[time of flight small angle neutron diffractionⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#Time-of-FlightSmallAngleNeutronDiffraction>**belongs to**

[neutron diffraction^c](#)

is same as

[time of flight s a n s](#)

[time of flight spectrometerⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#Time-of-flightSpectrometer>

belongs to

[Instrument^c](#)

is also defined as

[class](#)

[time of flight spectroscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#Time-of-flightSpectroscopy>

belongs to

[technique^c](#)

is same as

[to f spectroscopy](#)

[timeof flight inverted geometry crystal analyser spectroscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#TimeofFlightInvertedGeometryCrystalAnalyserSpectroscopy>

belongs to

[neutron spectroscopy^c](#)

[to f spectroscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#ToF Spectroscopy>

belongs to

[neutron spectroscopy^c](#)

[technique^c](#)

is same as

[time of flight spectroscopy](#)

[tomographic microscopy with c r l sⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#TomographicMicroscopyWithCRLS>

belongs to

[microscopy^c](#)

[technique^c](#)

tomographyⁿⁱ

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IRI: <http://www.purl.org/pankos#Tomography>

belongs to

[technique^c](#)

is also defined as

[class](#)

topographyⁿⁱ

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IRI: <http://www.purl.org/pankos#Topography>

belongs to

[technique^c](#)

is same as

[diffraction imaging](#)

total scatteringⁿⁱ

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IRI: <http://www.purl.org/pankos#TotalScattering>

belongs to

[scattering^c](#)

tri c sⁿⁱ

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IRI: <http://www.purl.org/pankos#TriCS>

has facts

[supports technique^{op} single crystal diffraction](#)

triple axis spectroscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#TripleAxisSpectroscopy>

belongs to

[technique^c](#)

is same as

[three axis spectroscopy](#)

twin micⁿⁱ

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IRI: <http://www.purl.org/pankos#TwinMic>

has facts

[supports technique^{op}](#) [x ray microscopy](#)

European scientists with highest expertise in X-ray microscopy, diffractive X-ray optics, X-ray contrast technologies and detection, started in 2001 to integrate the advantages of complementary scanning and full-field imaging modes into a single instrument, which they named 'TwinMic'. The microscope station has been designed as highly modular in its optical configuration and specimen environment, and scientists, engineers and technicians continuously improve the instruments performance and versatility to suit experimenter's requirements.

u e112 p g m 1ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: http://www.purl.org/pankos#UE112_PGM-1

has facts

[supports technique^{op}](#) [x ray magnetic circular dichroism](#)

u e52 p g mⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: http://www.purl.org/pankos#UE52_PGM

has facts

[supports technique^{op}](#) [x ray magnetic circular dichroism](#)

u e56 1 p g mⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: http://www.purl.org/pankos#UE56-1_PGM

has facts

[supports technique^{op}](#) [x ray magnetic circular dichroism](#)

u e56 2 p g m 1ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: http://www.purl.org/pankos#UE56-2_PGM-1

has facts

[supports technique^{op}](#) [x ray magnetic circular dichroism](#)

u e56 2 p g m 2ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: http://www.purl.org/pankos#UE56-2_PGM-2

has facts

[supports technique^{op}](#) [x ray magnetic circular dichroism](#)

u s a n sⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#USANS>

belongs to

[technique^c](#)

is same as

[ultra high resolution small angle neutron scattering](#)

u s a x sⁿⁱ

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IRI: <http://www.purl.org/pankos#USAXS>

belongs to

[technique^c](#)

is same as

[ultra small angle x ray scattering](#)

u v and visible circular dichroism spectroscopyⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#UVAndVisibleCircularDichroismSpectroscopy>

belongs to

[spectroscopy^c](#)

u v soft x rayⁿⁱ

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IRI: <http://www.purl.org/pankos#UV-softX-Ray>

belongs to

[technique^c](#)

u v visible spectroscopyⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: <http://www.purl.org/pankos#UV-VisibleSpectroscopy>

belongs to

[technique^c](#)

u125 2 s g mⁿⁱ

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IRI: http://www.purl.org/pankos#U125-2_SGM

has facts

[supports technique^{op} x ray magnetic circular dichroism](#)

u41 p g mⁿⁱ

[back to [ToC](#) or [Named Individual ToC](#)]

IRI: http://www.purl.org/pankos#U41_PGM

has facts

[supports technique^{op} soft x ray diffraction](#)

[u41 t x mⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#U41-TXM>

has facts

[supports technique^{op} x ray microscopy](#)

[u49 2 p g m 1ⁿⁱ](#)

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IRI: http://www.purl.org/pankos#U49-2_PGM-1

has facts

[supports technique^{op} x ray magnetic circular dichroism](#)

[u49 2 p g m 2ⁿⁱ](#)

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IRI: http://www.purl.org/pankos#U49-2_PGM-2

has facts

[supports technique^{op} x ray magnetic circular dichroism](#)

[ultra high resolution small angle neutron scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#UltraHighResolutionSmallAngleNeutronScattering>

belongs to

[technique^c](#)

is same as

[u s a n s](#)

[ultra small angle scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#UltraSmallAngleScattering>

belongs to

[technique^c](#)

[ultra small angle x ray scatteringⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#UltraSmallAngleX-RayScattering>

belongs to[technique^c](#)**is same as**[usaxs](#)[ultra x ray s a xⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#UltraX-RaySAX>**belongs to**[small angle x ray scattering^c](#)[under constructionⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#UnderConstruction>**belongs to**[under construction^c](#)**is disjoint with**[decommissioned, operational, under proposal](#)**is also defined as**[class](#)[under proposalⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#UnderProposal>**belongs to**[under proposal^c](#)**is disjoint with**[decommissioned, operational, under construction](#)**is also defined as**[class](#)[uv vuv spectroscopyⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#UvVuvSpectroscopy>**belongs to**[spectroscopy^c](#)[vesuvioⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#VESUVIO>**belongs to**

[neutron spectrometer^c](#)**has facts**[in facility^{op} is is](#)[supports technique^{op} neutron spectroscopy](#)[has operation status^{op} operational](#)

Vesuvio is a unique neutron spectrometer, which uses the high intensity of neutrons in the eV energy range and the pulsed nature of the ISIS source to measure atomic momentum distributions in a variety of condensed matter systems.

[v i v a l d iⁿⁱ](#)[back to [ToC](#) or [Named Individual ToC](#)]**IRI:** <http://www.purl.org/pankos#VIVALDI>**belongs to**[single crystal diffractometer^c](#)**has facts**[in facility^{op} i II](#)

VIVALDI (Very Intense Vertical Axis Laue Dlffractometer) surveys large volumes of reciprocal space rapidly using the Laue technique with a cylindrical image-plate detector on a white neutron beam.

[v s a n sⁿⁱ](#)[back to [ToC](#) or [Named Individual ToC](#)]**IRI:** <http://www.purl.org/pankos#VSANS>**belongs to**[small angle neutron scattering^c](#)[technique^c](#)**is same as**[very small angle neutron scattering](#)[v u vⁿⁱ](#)[back to [ToC](#) or [Named Individual ToC](#)]**IRI:** <http://www.purl.org/pankos#VUV>**has facts**[in facility^{op} s I s](#)[supports technique^{op} v u v spectroscopy](#)[supports technique^{op} vacuum ultraviolet radiation](#)[v u v photoemissionⁿⁱ](#)[back to [ToC](#) or [Named Individual ToC](#)]**IRI:** <http://www.purl.org/pankos#VUVPhotoemission>

belongs to[technique^c](#)**v u v photoemission beamlineⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#VUVPhotoemissionBeamline>**has facts**[supports technique^{op} v u v photoemission](#)

The VUV Photoemission beamline, a joint project of ISM-CNR and Elettra - Sincrotrone Trieste, offers advanced instrumentation for Italian and International condensed matter community. The VUV is designed primarily for surface and solid state experiments by high resolution photoemission. The research activity at the VUV photoemission beamline covers a wide range of scientific topics on the physics of metal and semiconductor surfaces and interfaces.

v u v spectroscopyⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#VUVSpectroscopy>**belongs to**[technique^c](#)**v1ⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#V1>**belongs to**[neutron diffractometer^c](#)**has facts**[supports technique^{op} powder diffraction](#)**v12aⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#V12a>**has facts**[supports technique^{op} tomography](#)[supports technique^{op} ultra high resolution small angle neutron scattering](#)

An asymmetrically cut perfect Si single crystal monochromator is located is deflecting neutrons of 4.76 Å by (111) Bragg diffraction towards the sample position and the downstream end face of a completely asymmetrically cut analyzer crystal.

v14ⁿⁱ[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#V14>

Mirror Test Device

has facts

- [supports technique^{op} monochromatic imaging](#)
- [supports technique^{op} reflectometry](#)

The Instrument is a simple reflectometer with a lower flux and a smaller signal-to-noise ratio compared to V 6. It is devoted to the numerous tests necessary for the development and quality control of neutron optical devices, like supermirrors, benders etc. which are produced at HZB.

v15ⁿⁱ

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IRI: <http://www.purl.org/pankos#V15>

Extreme Environment Diffractometer (EXED) is a time-of-flight instrument optimized for diffraction in restricted angular geometries typical for extreme sample environment. A special focus is on neutron scattering in high magnetic fields. In the near future the instrument will be furnished by a dedicated 25+ T High Field hybrid Magnet (HFM), currently being built by the HZB in collaboration with the National High Magnetic Field Laboratory (Florida, US).

belongs to

- [neutron diffractometer^c](#)

has facts

- [supports technique^{op} neutron scattering](#)
- [supports technique^{op} powder diffraction](#)
- [supports technique^{op} single crystal diffraction](#)

v16ⁿⁱ

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IRI: <http://www.purl.org/pankos#V16>

has facts

- [supports technique^{op} very small angle neutron scattering](#)

v18ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#V18>

has facts

- [supports technique^{op} time of flight spectroscopy](#)

BioRef is a time-of-flight reflectometer which is intended to focus on soft matter applications, especially at solid–liquid interfaces, for the investigation of biological model systems under physiological conditions including kinetic studies. The instrument was built in a joint collaboration between HZB and the University of Heidelberg with financial support by the BMBF Verbundforschung. Unique features of BioRef are the chopper system, which allows for

focusing on a certain Q-range in order to support fast kinetic studies, and the availability of optional in situ IR spectroscopy measurements that provide conformational information under the same experimental conditions under which simultaneously the neutron reflectivity is providing structural data.

v19ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#V19>

has facts

[supports technique^{op} tomography](#)

v2ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#V2>

Cold Neutron 3-Axis Spectrometer or FLEXX

has facts

[supports technique^{op} quasielastic scattering](#)

[supports technique^{op} spin echo spectroscopy](#)

[supports technique^{op} triple axis spectroscopy](#)

The instrument name is derived from the flexibility of the spectrometer parameters which permit non-standard experiments and its use in the development of novel methods. The instrument has been recently upgraded and rechristened FLEXX. Its new position at the end of the NL1B guide will allow a larger coverage in wavevector transfer, and the guide itself has been upgraded with m=3 neutron supermirrors to allow more neutrons to be transported from the source to the instrument.

v20ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#V20>

ESS Test Beamline

v3ⁿⁱ

[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#V3>

belongs to

[Instrument^c](#)

has facts

[supports technique^{op} elastic scattering](#)

[has resolution level^{op} high resolution](#)

The time-of-flight spectrometer NEAT is undergoing an extensive upgrade until 2013.

[v4ⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#V4>**has facts**[supports technique^{op} small angle neutron scattering](#)[v6ⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#V6>**has facts**[supports technique^{op} reflectometry](#)[v7ⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#V7>**has facts**[supports technique^{op} radiography](#)[supports technique^{op} tomography](#)[vacuum ultraviolet radiationⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#VacuumUltravioletRadiation>**belongs to**[technique^c](#)[variable polarization x u v beamlineⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#VariablePolarizationXUVBeamline>**belongs to**[Instrument^c](#)**is same as**[p04](#)[VERSOXⁿⁱ](#)[back to ToC or Named Individual Toc](#)**IRI:** <http://www.purl.org/pankos#B07>**has facts**[in facility^{op} diamond](#)[supports technique^{op} scanned probe imaging](#)

[very small angle neutron scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#VerySmallAngleNeutronScattering>**belongs to**[technique^c](#)**is same as**[vsans](#)[waxsⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#WAXS>**belongs to**[scattering^c](#)**is same as**[wide angle x ray scattering](#)[wishⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#WISH>**belongs to**[neutron diffractometer^c](#)**has facts**[in facility^{op} wish](#)[supports technique^{op} neutron diffraction](#)[has operation status^{op} operational](#)

Wish is a long-wavelength diffractometer primarily designed for powder diffraction at long d-spacing in magnetic and large unit cell systems, with the option of enabling single-crystal and polarised beam experiments.

[wide angle scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#WideAngleScattering>**belongs to**[technique^c](#)[wide angle x rays a x sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#WideAngleX-RaySAXS>**belongs to**[scattering^c](#)

[wide angle x ray scatteringⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#WideAngleX-RayScattering>**belongs to**[technique^c](#)**is same as**[w a x s](#)[x a f sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#XAFS>**belongs to**[technique^c](#)**is same as**[x ray absorption fine structure](#)[x a f s beamlineⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#XAFSBeamline>**has facts**[supports technique^{op} \[small angle x ray scattering\]\(#\)](#)

XAFS at Elettra is the Italian beamline dedicated to x-ray absorption spectroscopy. It is installed on a bending magnet source and it was designed to cover a wide energy range: from 2.4 to 27 keV meeting the needs of a large number of researchers in the area of conventional x-ray absorption spectroscopy.

For this reason the research activity at the XAFS at Elettra is quite diverse and ranges from fundamental physics to catalysis to material and environmental science.

[x a n e sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#XANES>**belongs to**[technique^c](#)**is same as**[x ray absorption near edge structure](#)[x a sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#XAS>**belongs to**

[technique^c](#)

is same as

[x ray absorption spectroscopy](#)

has facts

[technique of^{op} i n20](#)

x d m rⁿⁱ

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IRI: <http://www.purl.org/pankos#XDMR>

belongs to

[technique^c](#)

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[x ray detected magnetic resonance](#)

x e sⁿⁱ

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IRI: <http://www.purl.org/pankos#XES>

belongs to

[technique^c](#)

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[x ray emission spectroscopy](#)

x i l i iⁿⁱ

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IRI: <http://www.purl.org/pankos#XIL-II>

has facts

[supports technique^{op} extreme ultraviolet interference lithography](#)

[in facility^{op} s l s](#)

x m c dⁿⁱ

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IRI: <http://www.purl.org/pankos#XMCD>

belongs to

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[x ray magnetic circular dichroism](#)

x m l dⁿⁱ

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IRI: <http://www.purl.org/pankos#XMLD>

belongs to

[dichroism^c](#)[technique^c](#)**is same as**[x ray magnetic linear dichroism](#)[x mchi dⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#XMchiD>**belongs to**[dichroism^c](#)[technique^c](#)**is same as**[x ray magnetochiral dichroism](#)[x n c dⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#XNCD>**belongs to**[dichroism^c](#)[technique^c](#)**is same as**[x ray natural circular dichroism](#)[x n l dⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#XNLD>**belongs to**[dichroism^c](#)[technique^c](#)**is same as**[x ray natural linear dichroism](#)[x p c sⁿⁱ](#)[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#XPCS>**belongs to**[technique^c](#)**is same as**[x ray photon correlation spectroscopy](#)[x p dⁿⁱ](#)[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#XPD>

belongs to

[diffraction^c](#)

x p sⁿⁱ

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IRI: <http://www.purl.org/pankos#XPS>

belongs to

[technique^c](#)

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[x ray photoelectron spectroscopy](#)

x r dⁿⁱ

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IRI: <http://www.purl.org/pankos#XRD>

belongs to

[technique^c](#)

x r d1ⁿⁱ

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IRI: <http://www.purl.org/pankos#XRD1>

has facts

[supports technique^{op} electron spectroscopy](#)

[supports technique^{op} x ray diffraction](#)

The X-Ray Diffraction 1 (XRD1) beamline has been designed (in collaboration with the Istituto di Cristallografia - CNR) primarily for macromolecular crystallography, but the characteristics of the beamline permit to perform a wide variety of experiments. The light source is a multipole wiggler with a useful range from 4 to 21 keV. The optics consist in a vertical collimating mirror, a double-crystal Si(111) monochromator followed by a bendable focussing mirror. The multipole wiggler spectrum includes high photon flux at low energies, allowing the optimization of the anomalous signal of several heavy atoms (up to the calcium edge), and offering the enhancement of the Sulphur anomalous signal.

x r d2ⁿⁱ

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IRI: <http://www.purl.org/pankos#XRD2>

has facts

[supports technique^{op} x ray diffraction](#)

A new beamline will be constructed at section 11.2 and will be operational in 2014. The high photon flux provided by the Super Conducting multipole Wiggler (SCW) installed at the 11.2 section will permit the operation of more than one branch line at the same time. The actual

project, under development, consists of three branch lines, one variable energy beamline and two fixed energy beamlines.

The XRD2 variable energy beamline (8 to 35 keV) will be complementary to XRD1 and will be dedicated to high throughput protein crystallography experiments: large tunable energy range (8.0 - 30.0 keV) for SAD/MAD experiments, automated sample mounting in cryogenic environment and high speed large area detector will be some of the important features of this beamline.

x r fⁿⁱ

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IRI: <http://www.purl.org/pankos#XRF>

belongs to

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[x ray fluorescence](#)

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IRI: <http://www.purl.org/pankos#XRR>

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[technique](#)^c

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[x ray reflectivity](#)

x r r x ray reflectivityⁿⁱ

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IRI: <http://www.purl.org/pankos#XRRX-RayReflectivity>

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[x ray reflectometry](#)^c

x ray absorption fine structureⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayAbsorptionFineStructure>

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[xafs](#)

x ray absorption near edge structureⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayAbsorptionNear-edgeStructure>

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[xanes](#)

x ray absorption spectroscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayAbsorptionSpectroscopy>

belongs to

[x ray spectroscopy](#)^c

is same as

[xas](#)

x ray detected magnetic resonanceⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayDetectedMagneticResonance>

belongs to

[technique](#)^c

is same as

[xdmr](#)

x ray diffractionⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayDiffraction>

belongs to

[technique](#)^c

is also defined as

[class](#)

x ray diffraction imagingⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayDiffractionImaging>

belongs to

[x ray imaging](#)^c

x ray emission spectroscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayEmissionSpectroscopy>

belongs to

[technique](#)^c

is same as

x es**x ray excited optical luminescenceⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#X-RayExcitedOpticalLuminescence>**belongs to**[fluorescence luminescence^c](#)**x ray fluorescenceⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#X-RayFluorescence>**belongs to**[fluorescence luminescence^c](#)**is same as**[xrf](#)**x ray fluorescence beamlineⁿⁱ**[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#X-RayFluorescenceBeamline>**has facts**[in facility^{op} elettra](#)[supports technique^{op} x ray fluorescence](#)

X-Ray Fluorescence is a highly versatile beamline developed by Elettra Sincrotrone Trieste. The beamline is optically designed to present beam parameters needed for high level measurements in spectroscopy as well as in microscopy.

The beamline will host in the near future (beginning 2014) an ultra-high vacuum chamber, project of the IAEA, which will allow the synergistic application of various X-Ray Spectrometry Techniques such as Grazing Incidence X-Ray Fluorescence (GI-XRF), Grazing Exit XRF, Total Reflection XRF (TXRF), X-ray Absorption Near Edge Structure – XANES and X-Ray Reflectometry.

x ray imagingⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#X-RayImaging>**belongs to**[technique^c](#)**is also defined as**[class](#)**x ray linear dichroismⁿⁱ**[back to ToC or Named Individual ToC](#)

IRI: <http://www.purl.org/pankos#X-RayLinearDichroism>

belongs to

[dichroism^c](#)

[x ray lithographyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayLithography>

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[x ray magnetic circular dichroismⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayMagneticCircularDichroism>

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[x ray spectroscopy^c](#)

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[x ray magnetic linear dichroismⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayMagneticLinearDichroism>

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IRI: <http://www.purl.org/pankos#X-RayMagnetochiralDichroism>

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[dichroism^c](#)

[x ray microscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayMicroscopy>

belongs to

[microscopy^c](#)

[x ray natural circular dichroismⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayNaturalCircularDichroism>

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[x ray natural linear dichroismⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayNaturalLinearDichroism>

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[x ray photoelectron diffractionⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayPhotoelectronDiffraction>

belongs to

[x ray diffraction^c](#)

[x ray photoelectron spectroscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayPhotoelectronSpectroscopy>

is same as

[x p s](#)

[x ray photoemission microscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayPhotoemissionMicroscopy>

belongs to

[microscopy^c](#)

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[x ray photon correlation spectroscopyⁿⁱ](#)

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IRI: <http://www.purl.org/pankos#X-RayPhotonCorrelationSpectroscopy>

belongs to

[technique^c](#)

[x ray spectroscopy^c](#)

is same as

[photon correlation x ray spectroscopy, x p c s](#)

x ray powder diffractionⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayPowderDiffraction>

belongs to

[x ray diffraction^c](#)

x ray raman scatteringⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayRamanScattering>

belongs to

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x ray reflectivityⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayReflectivity>

belongs to

[x ray reflectometry^c](#)

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x ray reflectometryⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayReflectometry>

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x ray scanning microscopyⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayScanningMicroscopy>

belongs to

[microscopy^c](#)

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x ray scatteringⁿⁱ

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IRI: <http://www.purl.org/pankos#X-RayScattering>

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XALOC aims to provide the present and future Structural Biology groups with a flexible and reliable tool to help in solving structures of macromolecules and complexes. The beamline copes with a broad variety of crystal sizes and unit cell parameters, and allows both wavelength dependent and independent experiments.

z o o mⁿⁱ[back to ToC or Named Individual ToC](#)**IRI:** <http://www.purl.org/pankos#ZOOM>**has facts**

[has operation status^{op}](#) [under construction](#)
[supports technique^{op}](#) [v s a n s](#)

Zoom will be a flexible, high count rate small-angle scattering instrument for advanced materials, magnetism, environment science, pharmacy and healthcare to study length scales 2-2000 nm. For the first time at ISIS, it will offer polarised small angle neutron scattering and will use novel focusing devices and high-resolution detectors to reach smaller Q, to complement the Sans2d instrument, without building a very long beam line. Zoom will start commissioning experiments in February 2015.

Annotation Properties

[description](#) [note](#) [preferred name](#)

[description^{ap}](#)

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IRI: <http://purl.org/dc/elements/1.1/description>

[note^{ap}](#)

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IRI: <http://www.w3.org/2004/02/skos/core#note>

[preferred name^{ap}](#)

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IRI: <http://www.purl.org/pankos#preferredName>

General Axioms

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[high pressure^c](#), [low pressure^c](#), [medium pressure^c](#)

[All Disjoint Classes](#)

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Namespace Declarations

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http://www.purl.org/pankos#

dc

http://purl.org/dc/elements/1.1/

owl

http://www.w3.org/2002/07/owl#

pankos

http://www.purl.org/pankos#

rdf

http://www.w3.org/1999/02/22-rdf-syntax-ns#

rdfs

http://www.w3.org/2000/01/rdf-schema#

skos

http://www.w3.org/2004/02/skos/core#

www-purl-org

http://www.purl.org/

xsd

http://www.w3.org/2001/XMLSchema#

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